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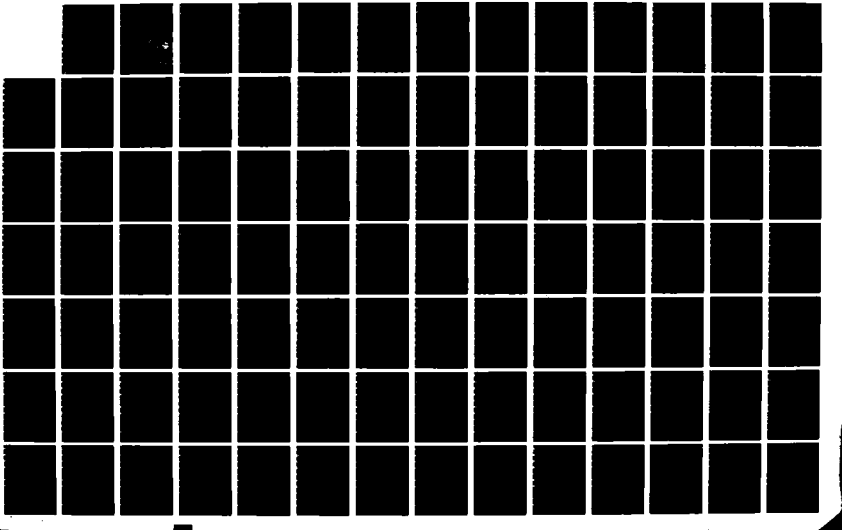

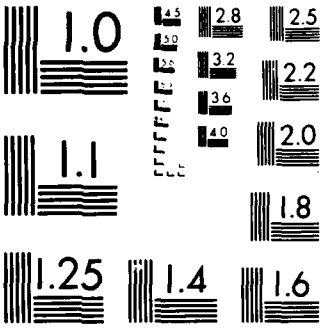

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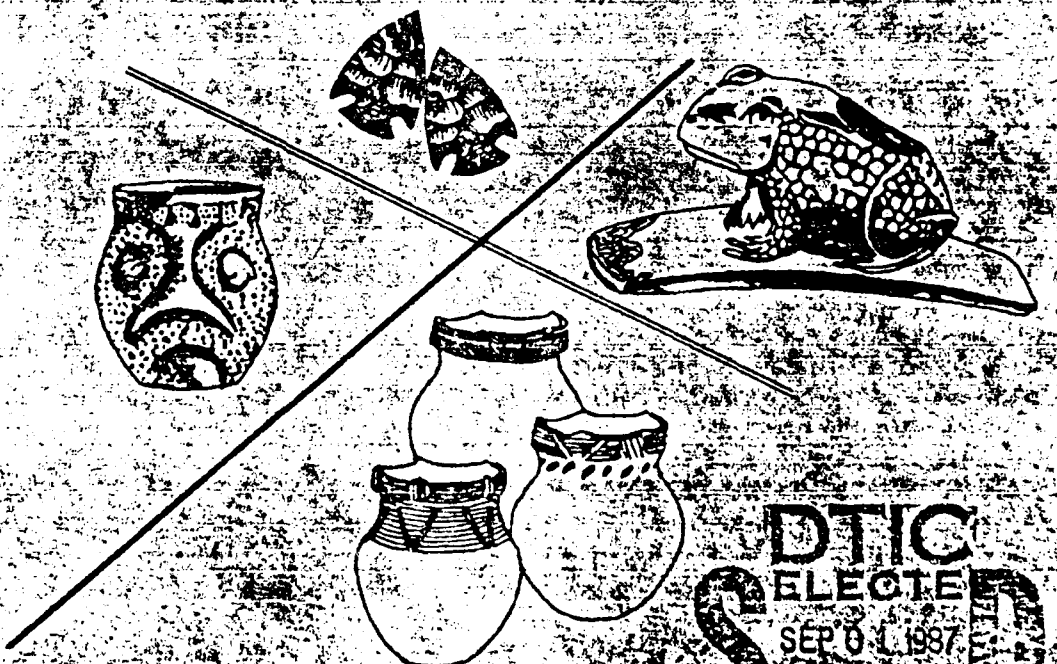
GREAT LAKES
ARCHAEOLOGICAL
RESEARCH CENTER, INC.

Reports of Investigation No. 186

EVALUATION OF THE ARCHAEOLOGICAL DATA BASE, CORALVILLE LAKE, IOWA



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EVALUATION OF THE ARCHAEOLOGICAL DATA BASE,

CORALVILLE LAKE, IOWA

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A B S T R A C T

Great Lakes Archaeological Research Center, Inc., Reports of Investigation No. 186 details the results of archaeological site evaluations at Coralville Lake, Iowa. Initial contract responsibilities required the field reconnaissance of 30 previously identified sites. Based on the results of this reconnaissance, up to 10 sites were to be selected for further investigation that would include sub-surface testing. The reconnaissance revealed only three (3) sites that were worthy of additional investigations. As a result, following a field inspection, the contract was modified to incorporate additional sites for field reconnaissance and, if possible, for evaluation. A total of 167 archaeological sites were investigated, utilizing: (1) archives and literature review; (2) informant interviews; (3) review of existing collections; (4) traditional pedestrian survey (surface collection); (5) shovel testing; (6) excavated soil pits; and (7) soil coring. A single site, 13 JH 272, is considered eligible for The National Register of Historic Places. The remaining sites have been determined to have been so severely disturbed that no further investigations are recommended. The results of these site evaluations have been integrated in the existing final management plan for Coralville Lake.

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INTRODUCTION

As part of the fulfillment of a Cultural Resources Management Plan at Coralville Lake, Iowa, Great Lakes Archaeological Research Center, Inc. conducted evaluations of 167 archaeological sites. The evaluation of the archaeological data base was a major component of the overall management plan designed by Overstreet (1985). Previous investigations had served, in part, to fulfill management objectives of: (1) Identification; (2) Evaluation; (3) Conservation; (4) Preservation; and (5) Interpretation. Survey and testing operations, for example, had resulted in the identification of more than 313 archaeological sites within the Coralville Project area (Zalesky 1977, Zieglowsky and Zalesky 1981, Schermer 1983, Emerson et al 1984, and Overstreet and Stark 1985a, 1985b).

Extensive excavation or thorough evaluation of the archaeological data base, however, was quite limited. Caldwell (1961), as part of the River Basin Survey operations of the Bureau of Ethnology, had reported on the excavation of open air sites, rockshelters, and mound groups in the Coralville Lake locality of the Iowa River valley. Subsequent to these investigations, Adrian Anderson had implemented a program of investigations through the University of Iowa at such sites as the Walter's Site, Sandy Beach, and other prominent localities (1971a, 1971b). Emerson et al (1984) also conducted evaluations of archaeological sites, specifically for National Register eligibility, at various localities within the Iowa River gorge locality at Coralville Lake. Finally, Overstreet and Stark (1985a, 1985b) directed test excavations at archaeological sites situated on a wide variety of landscapes at the project site.

In spite of these relatively detailed studies of prehistoric sites at Coralville Lake, fewer than 50% of the total number within the project area had been subjected to sub-surface testing. Further, virtually all of the sites that had been examined in any detail were demonstrated to have been severely disturbed, either by erosional events associated with Holocene climatic events, or, by recent shoreline erosion associated with the Coralville Lake project operations. Given these limitations, the potential for conservation of the archaeological resources, particularly for the purposes of addressing significant research questions, was unknown. These investigations were designed to secure adequate data to evaluate the research potential of the site inventory for Coralville Lake. Essentially, this reflected implementation of the evaluation phase of the project management plan (Overstreet 1985: 71-88).

Following submittal of a technical proposal, Contract DACW25-86-C-0028 was awarded to Great Lakes Archaeological Research Center, Inc. to implement an evaluation program. The contract (see Appendix A) had several major objectives. The primary objectives, as stated in the contract specifications, were:

(1) Develop and execute a research design for field reconnaissance of 30 previously identified prehistoric sites to determine potential eligibility for inclusion in the National Register of Historic Places.

(2) Provide for an intensive archaeological testing program to evaluate the significance of no more than 10 archaeological sites or significant geomorphological contexts based upon stage 1 results.

These investigations were cited to be in accordance with the National Historic Preservation Act of 1966 (as

amended), Executive Order 11593, the Archaeological and Historic Preservation Act of 1974, and Title 36 of the Code of Federal Regulations (Parts 60-66 and 800). In addition, the investigations were designed to comply with the guidelines: Treatment of Archaeological Properties (Advisory Council on Historic Preservation 1980) and the U.S. Park Service guidelines entitled Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (Federal Register Vol. 48, No. 190, Thursday, September 29, 1983).

Phase 1 field reconnaissance resulted in the identification of a very limited number of the 30 sites in the evaluation pool that were worthy of further consideration. As a result, the principal investigator met with representatives of the Rock Island District, Corps of Engineers to review the project objectives. It was determined, during the course of the field inspection to conduct sub-surface testing at sites JH 109, JH 123, and JH 272. The determination was also made to continue preliminary evaluation of additional sites whose management code (see Overstreet 1985) indicated that a particular site had not been sufficiently investigated to secure a determination of eligibility for The National Register of Historic Places. A contract modification was executed identifying these changes in the project objectives. The modification is attached to this report as Appendix A.

Field work was initiated in June of 1986 and continued, with several interruptions owing to high lake levels, into November, 1986. One hundred sixty-seven (167) historic and prehistoric sites were subjected to various investigative techniques. Only one site, 13 JH 272, is considered eligible for The National Register of Historic Places.

In summary, the modified objectives would serve to fulfill management recommendations established in the Cultural Resources Management Plan (Overstreet 1985: 75-89). As noted in the evaluation status update in 1985:

> Some sites have been evaluated by review of previous investigations followed by a field verification to ascertain current status. In some cases, soil coring, shovel probing, or simple observation and surface collection have provided sufficient information to determine the potential for future research at a given site (1985: 75).

It was not considered appropriate to attempt site evaluation without field verification, primarily because of conflicting assessments of site significance in earlier reports. The management plan states:

> Ancillary to this task was an assessment of sites that should be assigned highest priority for future evaluation. This was a difficult task because of conflicting observations of earlier researchers which have already been discussed. However, in no instance did I assume data to be incorrect. Further, the focus was placed on known archaeological sites that had the greatest potential for intact stratigraphic deposits, or that would provide information relating to specific questions raised by the inventory summary (Overstreet 1985: 75).

Finally, the management plan evaluation component was directed to the most effective means of completing the evaluation sample without intensive, site-specific investigations unless such intensive work was justified by the identification of intact stratigraphic contexts. The plan states:

> It should be noted that many of the sites indicated in Table 10 may be evaluated by simple reconnaissance techniques supplemented by coring and/or minimal excavation. In no case do I recommend that formal excavation procedures be implemented prior to establishing site context by the above means. This recommendation is made largely from the perspective of earlier conflicting reports regarding site research potentials and because virtually all sites located in the Iowa River gorge between the elevations of 680.00-705.00' AMSL that have been evaluated during the current investigations have been

redeposited from upslope locations, or, exist as lag deposits on stripped surfaces. Finally, these recommendations are made without benefit of on-site verification from the existing data file of archaeological sites for Coralville Lake. Based on previous investigations the sites identified are important for the information they can be expected to yield if it can be determined that they have not been destroyed by erosion or from other means.

The ensuing narrative addresses the specific methods and techniques employed in the site evaluation process, provides a summary description of each site evaluation, includes a recommendation for incorporation in the final management plan, and includes a summary statement of the evaluation phase of cultural resources management at Coralville Lake. Site specific data in the form of up-dated OSA site forms, lot check lists of cultural materials, and geomorphic data have been incorporated within the comprehensive data file (Great Lakes Archaeological Research Center, Inc. Reports of Investigations No. 167, The Archaeology of Coralville Lake, Iowa, Volume VII: Data File). Given the significant number of sites subjected to evaluation, the descriptions presented here are listed in numerical order for easy reference rather than in the order in which work was completed. Finally, by necessity, much site-specific detail was omitted. These data can be readily retrieved by referencing the data file.

SITE EVALUATION METHODS AND TECHNIQUES

The following methods and techniques were utilized during the course of evaluating archaeological sites at Coralville Lake for assignment to a site management category. Essentially, we sought to compile sufficient information to apply the criteria for nomination of specific sites to the National Register of Historic Places. These criteria are often applied in a variable manner. In some instances specific research questions are addressed, while in others, a vague concept of "research potential" is applied. The former orientation was utilized throughout the evaluation process at Coralville Lake.

The first step in the evaluation process was to thoroughly review existing data. Often this was restricted to information that had been recorded on the Office of The State Archaeologist of Iowa site forms. In other instances we were gratified to encounter a formal published report, unpublished manuscript, or field notes. Another important source was existing site collections, the vast majority of accessible data are housed at the Office of The State Archaeologist of Iowa. Other collections are in the hands of private individuals, housed at Great Lakes Archaeological Research Center, Inc., or at the Smithsonian Institution.

Having compiled and reviewed the baseline data, field verification was attempted. Reconnaissance (field verification) included such investigative techniques as surface collection, shovel probing, coring, excavation of soil pits, and informant interviews.

The final step in the evaluation phase was a process wherein the data recovered from the site were considered in relation to specific research questions. Could recovery operations at a particular site be expected to yield significant information? That is to say, could specific behaviors relating to such traditional lines of inquiry such

as subsistence, settlement, specific functional tasks, or identification of activity areas be elucidated by formal excavations? Further, did the assemblages at particular sites provide sufficient information to infer that excavation might lead to identification of poorly known components, procurement and processing patterns, or other topical themes?

Previous investigations at the Coralville Lake locality (e.g., Caldwell 1961, Anderson 1971a, 1971b, Emerson et al 1984, Overstreet, Stark, and Anderson 1985, Shermer 1983, Overstreet and Stark 1985a, 1985b, and Zieglowsky and Zalesky 1981) had all emphasized the disturbance and destruction of archaeological sites. As a result, our primary focus in the evaluation procedure was to determine if a site under consideration had any promise of intact stratigraphy. Would excavation provide information beyond that we could secure from surface collection or other less intensive techniques? If this inquiry could not be answered affirmatively, we concluded that the site in question was not eligible for The National Register of Historic Places. If the reply was positive, our subsequent efforts were directed to the identification of specific research problems that could be addressed. The following discussion provides greater detail regarding specific techniques applied.

Literature & Archive Review:

A comprehensive annotated bibliography had recently been compiled for historic and prehistoric sites in the Coralville Lake project area (Emerson et al 1984). These bibliographic references, as well as those added to the compilation (Overstreet, Stark and Anderson 1985, Overstreet and Stark 1985a, 1985b, and Anderson and Overstreet 1986) by more recent investigations were reviewed for site-specific information. Finally, the site data provided by Caldwell (1961), Wheeler (1949), Zalesky (1977),

Zieglowsky and Zalesky (1981) and Shermer (1983) were also consulted. These references, however, were generally not sufficiently detailed to provide necessary pre-field information.

For these reasons, initial site form reports and subsequent site form updates, along with site collection inventories, were reviewed at the Office of the State Archaeologist of Iowa. The well organized nature of these data, along with the gratifying special assistance of Ms. Debby Zieglowsky, often provided the precise information necessary to facilitate field relocation. In addition, review of the site forms and associated artifact sketches, in some cases provided adequate information to assign a preliminary component designation.

The last major source of site-specific information was derived from contract reports. Of particular use were the reports by Weichman (1975) which detailed results of the archaeological survey of the Coralville Reservoir Road Improvement Project and Weichman and Tandarich (1974) which provided a summary of known archaeological sites within the Iowa River valley between Coralville, Iowa and the Cedar River.

Collections Review:

Collections from sites at Coralville Lake were harbored in four repositories: (1) The Office of the State Archaeologist of Iowa; (2) the Smithsonian Institution; (3) Great Lakes Archaeological Research Center, Inc.; and (4) Impact Services, Mankato, Minnesota. In addition, major private collections include those held by James Zalesky and Duane Miller. Fortunately, Miller and Zalesky have donated selected materials from many of the sites they collected to OSA.

The collections at OSA were made available for review and photographic recording. In addition, a collection of representative diagnostic artifacts was made available on long-term loan both for purposes of site-specific

familiarization and for incorporation within Volume III of this report, an updated overview of Coralville prehistory. Again, Ms. Debby Zieglowsky, Dr. Joseph Tiffany, and Dr. Duane Anderson were quite helpful in securing access to these collections, providing a space to work with the materials, and answering questions regarding contradictions or inconsistencies in past reporting of information. Ms. Zieglowsky was particularly helpful in locating the materials from the Walter's Site and other collections excavated by Anderson (1971a, 1971b).

Ms. Patricia Emerson was kind enough to forward the collections held by Impact Services, Inc. These collections, and those currently curated by GLARC, Inc. were reviewed on a site by site basis prior to evaluation investigations of particular sites. Review of collections was directed to confirming previously defined components, identifying unrecognized or unreported components, and identifying site function based on the range of assemblages present in the collection.

Property Documents:

A significant number of previously reported sites (Emerson et al 1984) had not been verified to be located within the US Army Corps of Engineers Coralville Lake project property boundaries. With many of these sites the legal description was not precise to a degree that would allow the deternation of site location relative to COE property boundaries. Thus, prior to field verification, detailed property boundary maps housed at the Coralville Lake project office were checked. This provided sufficient information to determine that several sites listed within earlier inventories (Emerson et al 1984) were, in fact, not situated on federal land. Following this determination, such sites were removed from the cultural resources management inventory.

Informant/Collector Interviews:

Local land-owners and avocational archaeologists were interviewed, consistent with previous investigations at Coralville Lake (Overstreet, Stark, and Anderson 1985, Overstreet and Stark 1985a, 1985b). In some instances collectors were encountered in the field. Interviews with previous land-owners, or, land-owners with holdings immediately proximate to the project site, often led to the identification of local collectors who could provide information relative to specific sites.

Surface Collection:

Surface collection was the primary investigative technique. In this instance tight-interval transects were employed. An area coincident with the legal description of a previously reported site was traversed with surface collection transects, spaced a maximum of 10.0m apart. Cultural material was observed and/or collected, thereby verifying a given site location. In addition, surface collection was utilized to provide a preliminary geomorphic assessment. For example, if cultural material was observed or collected from exposed bedrock or surfaces that pre-dated human occupation of the region, it was clear that the deposit of cultural debris was a lag deposit. Each site was also evaluated, generally for up-slope areas, to determine if there was potential for adjacent areas to harbor contextual data. If such potential was identified, or, if surface collection failed to provide sufficient information, sub-surface testing was implemented. This consisted of the application of three techniques, either singularly or in combination, including shovel probing, coring, and soil pit excavation.

Shovel Probing:

Shovel testing or probing is a sub-surface technique that has been utilized in many ways and with many variations on a common theme. Here, shovel probing consists of the excavation of an approximate 25-35.0cm diameter pit. Depth is highly variable based on surface conditions. For example, at Coralville Lake some site areas have been obscured by the deposition of a thin veneer of silt. These recent sediments can often be seen to mask a very old surface such as the Iowan erosion surface. In such conditions, shovel probing depths would be less than 10.0cm. Shovel probing was also applied to fallowed agricultural fields. In this instance the depth of probes would extend at least through the Ap horizon. Once the modern plow zone had been penetrated, the sub-surface could be evaluated for age (refer to Anderson and Overstreet 1986) or other potentials for encountering buried archaeological sites.

Shovel probes were excavated at 10.0m intervals along transects spaced 10.0m apart. Spoil from shovel tests was passed through 1/4" mesh, the content examined, stratigraphy was noted, and the shovel probes were immediately back-filled.

Soil/Coring, Soil Pits:

Where information from surface collection, shovel probing, and other near-surface techniques was inadequate to complete the evaluation, soil coring and/or excavation of soil pits were conducted. Soil pits consisted of 1.0 x 1.0m excavations that were expanded from previously dug shovel probes. When these excavations reached a depth that prohibited further excavation, a bucket auger was utilized to continue examination of the soil profile. Information derived from these techniques were incorporated in the geomorphic description for those sites that were thought to

have potential for encountering deeply buried archaeological deposits.

Geomorphic Description:

At each site where sub-surface investigations were conducted, a detailed description of the soil profile and on-site geomorphology was provided. This consisted of a formal description of the profile in metric increments (as well as English measures), color both moist and dry, carbonate content of pH, drainage, organic enrichment, or other features. The focus was placed on identifying paleosols, which in turn could harbor buried archaeological materials. A general summary of the geomorphic information is provided with the evaluation summary of each site where sub-surface testing was conducted. More detailed records are incorporated in the data file along with the up-dated site record.

In conclusion, the employment of these methods was sufficient to determine the research value of archaeological sites at Coralville Lake. Consistent with earlier investigations, save those of Caldwell (1961), most sites could be determined to have been radically altered (destroyed for all intents and purposes) by shoreline erosion due to lake level fluctuations. In some instances it was necessary to conduct shovel probing either to determine the presence or absence of cultural material adjacent to an eroded locality, or, to penetrate silts deposited by floods during the last few years. Finally, soil pit excavation and coring was implemented to identify site formation processes, clarify stratigraphic contexts, and identify the presence or absence of buried soils. These techniques were also used to verify the depth of archaeological materials that were identified on surfaces which could not easily be identified as those which were too old to have been occupied by prehistoric residents of the

region. The conclusions drawn from application of these methods and techniques are noted, on a site by site basis, in the following narrative which includes an evaluation summary for each site investigated during this phase of the Management Plan (Overstreet 1986).

SITE EVALUATION SUMMARIES

The following narrative provides an evaluation summary of each previously reported archaeological site that was field checked during the 1986 season. In some instances the evaluation consisted of nothing more than an attempt to relocate a previously reported site, but, relocation was not successful due to such factors as inundation, recent siltation, or our inability to identify any evidence of historic or prehistoric occupation or utilization. More often than not, site evaluation consisted of an on-the-ground confirmation of the archaeological site, collection of cultural materials, soil coring, strata pit excavation, bucket auger investigation, or examination of an exposed profile. This approach had two primary objectives. First, we sought to secure additional information which would be of use in determining or confirming the nature of cultural components at the site. The second objective was to assess the stratigraphic potentials at a given site. For example, if cultural materials were found on exposed bedrock or very old surfaces as lag deposits it was readily apparent that the context of the site was destroyed by erosion and no further evaluation was necessary. However, if there appeared to be some potential for encountering undisturbed archaeological contexts upslope or in the exposed archaeological deposit, additional subsurface investigation was conducted. These investigations included shovel probing or formal 1x2.0m test excavation units. The broader goals of the combined efforts at each site were to secure sufficient evidence from which an evaluation of site significance could be conducted. In turn, this information was then incorporated within the existing data file and a final management recommendation was made for each site subjected to evaluation.

JH 6:

The Big Bend Mound group was first reported by R.P. Wheeler (1949: site form) during his survey and testing operations at Coralville Lake. This group was formerly known as 13 JH 54, however, it has now been recodified as 13 JH 6. Two low conical mounds, about 27' and 36' in diameter were located in a schoolyard. Later investigations of JH 6 include Caldwell (1957: site form), Caldwell (1961), Weichman and Tandarich (1974), Weichman (1975), Perry (1983: site form), and Emerson et. al. (1984). The total number of mounds reported from one observer to the next is not consistent. These estimates include two by Wheeler (1949), four visible with seven originally reported by Caldwell (1957, 1961) and two again by Perry (1983) and Emerson et. al. (1984). All of the investigations included surface observations. None reported excavation. However, "looter potholes" were observed. Perry (1983: site form) reported observing two mounds and concluding that some of the mounds were destroyed by the construction of a log cabin.

Great Lakes Archaeological Research Center, Inc. revisited the site twice in 1986 (once with Charles Smith and Kenneth Barr of the Rock Island District, Corps of Engineers) and located only one mound. This mound is covered with green broad leaf plants, is situated just off the road in the old schoolyard. The schoolhouse is now a private residence. The mound is outside of the ACOE boundary and therefore the ACOE has no management responsibilities. Site JH 6 has been dropped from management consideration.

JH 8:

JH 8 was first reported by Wheeler in 1949 (McKusick, 1949: site form) and update report was made by Caldwell in 1957 (site form). JH 8 consists of three low conical mounds, ranging from 24 to 30' in diameter, oriented east and west along the bluff north of the Iowa River.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The mounds are located on private land outside of the ACOE Boundary and should be removed from the Coralville Management Plan.

JH 26:

JH 26 was first reported by Anderson in 1972 (site form) and was subsequently visited and collected by Zalesky (1977), Emerson et. al. (1984) and GLARC, Inc. (1984). The site is situated on a sandy knoll adjacent to a small creek located at the end of a field road north of Swan Lake. The site has been heavily collected in the past. Over three hundred forty flakes of different chert[illegible] have been reported. Also broken bifaces, other chipped stone [illegible], and pottery are also in its inventory.

Great Lakes Archaeological Research Center, Inc. visited the site again in 1986. However, it was not possible to evaluate the site at anytime during the 1986 field season. The pool elevation did not recede below 683.01' ASL since June, which puts it underwater. This site could be revisited during a period of unusually low pool elevation. For all practical purposes it can be considered permanently inundated.

JH 29:

There is conflicting information regarding JH 29 which was first reported by Ruppe (n.d., site form). Miller updated the original site form in 1982. Unfortunately, the site could not be plotted or relocated from its legal

description. The general location and the legal description do not correspond.

It is possible that JH 29 may be coincident with JH 329 or that the four flakes reported by Miller could have been translocated, down slope, from JH 329. Because of the equivocal data, our inability to relocate the site, and the very limited nature of the assemblage, JH 29 is not considered to be significant. JH 29 has been placed in a no management category in the Coralville Lake cultural resources master plan.

JH 30:

JH 30 is located on a terrace north of the Iowa River defined by a small gully to the east and an old road bed to the west. First reported by Zalesky in 1977 (site form), JH 30 yielded a collection which included two projectile points, a biface fragment and a flake/scraper. The site was updated during the 1984 Coralville survey and two more projectile points, identified as Archaic, were found.

Great Lakes Archaeological Research Center, Inc. revisited the site several times in 1986. Because of the high water elevations, the site was checked periodically during water level decreases which ranged from 700' to 685' ASL. No cultural material was found during these visits. The floodplain here has been scoured and recent silts have been redeposited by water level fluctuations. If the site was located below the 685' elevation we can be sure that it is severely eroded, similar to the exposed landscape at higher elevations. Therefore, no further testing or site management is recommended for JH 30.

JH 31:

The site is located at the mouth of an unnamed creek, confluent to the Iowa River. Material is found on both

sides of tne creek, at the confluence, and also upstream for a short distance. JH 31 was first reported by Zalesky in 1977 (site form). His surface collection yielded two projectile points and four other lithic tools. Krisan (n.d.) later updated the site and donated point fragments and other chert debris to the office of the Iowa State Archaeologist.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation at the time of collection was 687.4' ASL. Two chert flakes were found on a ridge slope. The slope is an extremely eroded silty shoreline without an evidence of any surface soils. Due to the extreme erosion of JH 31, no further testing or site management is recommended.

JH 33:

JH 33 was first reported by Zalesky in 1977 (site form). Later site updates were provided by Miller (1979: site form), Zieglowsky and Zalesky (1981), and Emerson et. al. (1984). The site is located on a broad, low terrace on a large bend of Coralville Lake about 1/4 mile upstream from Mahaffey Bridge. The site is bounded by Coralville Lake, an inlet to the southeast and an inlet to the west (Emerson et. al. 1984). Various site surveys have yielded approximately 25 chert tools, over 150 flakes and over 100 pottery sherds.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation at the time of collection was 686.62'. At this elevation part of the site should have been exposed as Emerson et. al. (1984) reported the site to be situated between 680 and 690' ASL. The terrace has been subjected to erosion from wave action and siltation from flooding. One large chert core and a few scattered fragments of fire-cracked rock were located. Due

to the erosion of JH 33, no further testing or site management is recommended.

JH 36:

JH 36 was first reported by Zalesky and Zieglowsky (1981). The site is located on the river terrace just upstream from the mouth of an unnamed northern affluent of the Iowa River (Zalesky, 1977: site form). Four projectile points, one drill and one biface fragment were recorded on the site form.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation at the time of survey was 689.69'. The present land surface consists of eroding silts. One small pressure flake was found five feet above the water level. There are also three foundations with poured concrete and reinforcing bars. A portion of JH 36 must be underwater at time of collection, however, due to the extreme erosion, no further testing or site management is recommended.

JH 37:

JH 37 was first recorded by Zalesky in 1977 (site form). The site is located on the same terrace as JH 36 and consists of a sand bar deposit grading into the back beach area of a meander scar (Zalesky, 1977: site form). Thirty-seven projectile points, twenty-four tools or fragments and two pottery rim sherds were found.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. At the time of collection the pool elevation was 689.69' ASL. The terrace is eroded to the ridge top. No prehistoric material was found on the exposed terrace. If any of the site remains it must be underwater, however, due to the eroded condition of this

terrace, no further testing or site management is recommended.

JH 42:

Known as the Walter's Site, JH 42 was reported in 1967. The site was excavated by A. Anderson (1971) and interpreted as a Late Woodland campsite. The site was situated atop a dune-like formation and upon excavation yielded evidence of a burned wattle and daub structure. JH 42 has yielded ceramics and lithics that indicate both Middle and Late Woodland occupations. Access to the Walter's site is gained through Lake MacBride State Park. Highway 382, at the entrance to the park can be approached by vehicle. From that point ingress and egress is by foot, a distance of approximately 2000' along a "nature trail" (refer to the data file for sketch map).

Prior to construction of the reservoir, the site was apparently on a small terrace to the east of Hoosier Creek. At the time of excavation (Anderson 1971) the site was said to be highly disturbed, a function of the unconsolidated sandy matrix on the dune-terrace feature. Two site visits in September of 1986 resulted in easy relocation of the cultural deposit. However, the fire-cracked rock, lithic debris, and two small side-notched projectile points collected during that time were encountered on a steeply eroded slope as lag deposits. Reconnaissance conducted upslope also failed to provide any evidence of stable or buried surfaces at JH 42. Observations of mature trees above the Walter's Site indicate that as much as 10-15' of land has been removed by high water stages of Coralville Lake. Many of these trees are supported by butress or tap roots. Based on the results of this reconnaissance evaluation we concur with Anderson's (1971) recommendation that the context of the Walter's site has been destroyed and that JH 42 does not possess sufficient integrity to qualify

the site for the National Register of Historic Places. Any additional information collected from JH 42 is likely to be redundant and we recommend that it be removed from management consideration.

JH 43:

The Sandy Beach Site is very badly disturbed. Codified as JH 43, this site has a long history of investigations. McKusick recorded the Woodland habitation in 1967 and recovered Black Sand, Morton, and Madison/Minott's ceramics. Adrian Anderson conducted test excavations at JH 43 and reported his findings in 1971. Anderson noted the occurrence of Woodland occupations. The site is situated just north of the Sandy Beach recreation area. Zalesky (1977) also collected the site during the 1970's and reported Woodland ceramics and lithic implements secured during his visits. Emerson (1984) visited Sandy Beach during her survey work at Coralville Lake (1984) and concluded that a small portion of the site may remain intact.

Great Lakes Archaeological Research Center, Inc. conducted intensive surface collection of the site in 1984 and the site was visited again on two separate occasions in 1986. The most recent reconnaissance indicates that the vast majority of the site has been destroyed by borrowing activities for construction at the Sandy Beach recreation area. However, previous disturbance was also derived from Holocene climatic shifts which resulted in deflation, from lakeshore erosion, and from much public traffic. Notably, during the 1986 visitation only a single side scraper and two small chert waste flakes were observed and collected from the surface. The inference is that continued borrowing and/or intensive collector activity, has likely removed the vast majority of the archaeological remains.

A small area of approximately 20 x 30' remains covered with vegetation. This ground cover is primarily poison ivy and is indicative of surficial instability. Two very large silver maples (one of which has a breast height diameter of approximately 5.0') mark the limits of the least disturbed portion of JH 43. Subsurface investigations conducted at JH 43 has determined the absence of intact surfaces and served to complete the evaluation of the Sandy Beach Site.

Access to the Sandy Beach Site is attained by paved road which traverses the Sandy Beach Recreation Area. From this road a gravel trace allows immediate access to the site by vehicle. It is difficult, because of the erosion and borrowing activities, to reconstruct the topographic setting of JH 43. Earlier accounts describe the site as being situated atop a sandy knoll, a terrace, and a dune atop a loess mantles terrace. The latter account, provided by Emerson et. al. (1984) provides the most reasonable assessment and is compatible with our observations. Like JH 42, the Sandy Beach Site was situated on a prominent, well-drained topographic feature at the confluence of the west branch of Hoosier Creek and the Iowa River. No further management consideration should be afforded to JH 43. However, because of its accessibility and high visitor traffic, the site would be appropriate for interpretive purposes.

JH 44:

JH 44 was first reported by Anderson in 1967 (site form). The site was collected before this by Mrs. Wayne Walters and artifacts were donated to O.S.A. Anderson (1967, site form) describes the site location to be about one mile downstream from a landing on the right bank of the Coralville Reservoir across from JH 42. The site can be better described as situated on a terrace between two large inlets west of the Lake MacBride Dam. Other investigators

of JH 44 include Weichman and Tandarich, Weichman, Zalesky and Zieglowsky, and Shermer. Materials found range from Archaic to Late Woodland.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. Pool elevation at the time of collection was 687.4'. According to Anderson (1971) the site is on the terrace knoll about 10' higher than 680 storage level. Our investigations revealed that this terrace is being caved off into the reservoir, evident by shoreline cut 6 to 7' above water level. Erosion is also evident on top of terrace by lack of an established "A" horizon at the surface and in the cut bank profile. The cultivated terrace was walked but no cultural material was found. Due to the extreme erosion and lack of cultural material of JH 44, no further testing or site management is recommended.

JH 45:

JH 45 was first reported by Anderson in 1968 (site form). Anderson (1971) described the site as being situated at the mouth of Hoosier Creek valley. The site is now a boat landing for Twin View Heights, a housing development. Collectors found Madison cord impressed sherds when the landing was first constructed but little material has been found since that time.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685' ASL at the time of collection. The ridge point is presently rip-rapped and south of the rip-rapp is a 10-15' cut to a small sand beach area. No cultural material was found during Anderson's (1971) investigation as well as our investigations. Due to the extreme erosion of JH 45, no further testing or site management is recommended.

JH 46:

JH 46 was first reported by Anderson (site form: date not reported). The site is on a terrace above the 700' level, just south of the Jolly Roger boat landing (Anderson: site form). The site form was updated by Weichman and Tandarich (1974), Weichman (1975), Zalesky and Zieglowsky (1981) and Shermer (1983). The site appears to be a Late Woodland occupation based on the occurrence of Madison cord-impressed pottery (Anderson, 1971) and a Late Woodland side-notched projectile point (1981 Coralville Survey).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation at time of collection was 685.86'. The shoreline is extremely eroded with a 20-30' cut bank. The landscape is no longer intact and no cultural material was found. Due to the extreme erosion, destruction of JH 46, appears complete. No further testing or site management is recommended.

JH 47:

Named the Rickey Site, JH 47 was first reported by Anderson in 1968 (site form). Anderson (1971) locates JH 47 just upstream from the Lake MacBride Dam where a public boat landing had been constructed on a low terrace. This terrace is inundated during most of the year. Other site updates include Zalesky (1977: site form), and Weichman and Tandarich. According to Anderson (1971) both Early and Late Woodland pottery were collected but the site was ostensibly destroyed.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 694' at the time of collection. One flake was found on the eroded silts approximately 700' ASL. Due to the extreme erosion of JH 47, no further testing or site management is recommended.

JH 49:

Known as the Camp Daybreak Site, JH 49 was first reported by Anderson in 1970 (site form). Later site updates include Miller (1979, 1980) Zalesky (1977) and Emerson et. al. (1984). Written reports were provided by Anderson (1971), Weichman and Tandarich (1974), Weichman (1975), Zieglowsky and Zalesky (1981), Shermer (1983) and Emerson et. al. (1984). Materials collected from this site indicate a multicomponent occupation which ranges from Archaic to Late Woodland. Materials include many projectile points, "pounds" of chipping debris and "pounds" of pottery. The site is located on a southeast facing terrace between two prominent unnamed drainages on the west side of Coralville Lake. The site is bounded by steep bluffs to the north and west, as well as the drainages on each side (Emerson et. al. 1984).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.17' ASL. Emerson et. al. (1984) reported the site to be from 680-700' ASL. The ridge slopes are extremely eroded from pool level fluctuations and ridge slope run-off. Rocks and pebbles are found as lag deposits as well as limestone bedrock exposures at and above the water table. Two chert flakes were found close to 700' ASL amongst lag deposits. Even the wooded area on the ridge slope is eroded. The erosional cuts were collected at this higher elevation and no cultural material was found. Due to the extreme erosion of JH 49, no further testing or site management is recommended.

JH 50:

JH 50 was reported by Anderson (1971). The site is located on a small terrace of the Hoosier Creek Valley, about 1/2 mile east of the Sandy Beach Site (JH 43) (Anderson 1971). The terrace extends from a northwest-

southeast trending ridge. Modern historic debris was found together with chert flakes and unidentifiable pottery fragments.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685' ASL. The site area consisted of a very eroded sandy terrace. No cultural material was found. Due to the extreme erosion on the JH 50 site location, no further testing or site management is recommended.

JH 51:

Known as McAllister Creek II, JH 51 was first reported by Anderson in 1970 (site form). Site form updates include Miller (1976, 1980) and Zalesky (1977). Other text updates include Anderson (1971), Weichman and Tandarich, Weichman, Zalesky (1977) and Zieglowsky and Zalesky (1981). The site is located on the north shore of the Coralville Lake Reservoir on the west bank of an unnamed inlet to an intermittent stream about 1/2 mile east of old Highway 218.

Anderson (1971) reports a shell midden exposed by bank erosion with no artifact yield. He seems to feel the shell accumulation may be the result of muskrat activity. Both cultural materials and cultural debris, however, are components of the site collection at O.S.A. The terrace had been stripped of "A" horizon in 1971. Many flakes and a two-holed gorget were found. Miller's collection (1976, 1980) include "pounds" of waste flakes, a few projectile points and tools, and unidentified pottery sherds. Zalesky's collection (1977) yielded lithic tools including 28 projectile points, drills, graver and biface fragments, flake/scrapers, a sandstone abrader as well as pottery, including both body and rim sherds.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.53' ASL. The shoreline erosion exceeded 20' above this pool

elevation. A large scatter of fire-cracked-rock, lithic debris and a broken biface were found within 5-6' above the water level as well as in the water. Due to the extreme erosion of JH 51, no further testing or site management is recommended.

JH 52:

Known as McAllister Creek I, JH 52 was reported by Anderson in 1970 (site form). Later site form updates include Miller (1976) and Zalesky (1977). Published text includes Anderson (1971), Weichman and Tandarich (1974), Weichman (1975), and Zalesky and Zieglowsky (1981). The site is located on a terrace at the mouth of McAllister Creek. It is bordered by old Highway 218 to the west and an unnamed intermittent drainage inlet to the east. Most of the material collected from JH 52 consists of non-diagnostic lithic debris and pottery sherds with badly eroded surfaces (water-rolled). Zalesky (1977) reports five projectile points and one end scraper.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was at 690.53' ASL. At the time of investigation most of the terrace here was underwater. The exposed portion of the terrace manifested signs of severe wave erosion with some siltation from recent flood episodes. No cultural material was located. Due to the eroded nature of the JH 52 terrace, no further testing or site management is recommended.

JH 53:

JH 53 was first reported by Zalesky in 1977 (site form). The site was said to be located on the eastern terrace of the Iowa River approximately 1/4 mile upstream from JH 37 near the mouth of a gully that drains the adjacent upland (Zalesky, 1977). Twenty-four projectile

points and fourteen lithic tools were collected by Zalesky (1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69' ASL. The eastern terrace was underwater. However, the exposed shoreline exhibited extreme erosion. The terrace has been scoured at this location and if any cultural materials occur, they would be categorized as lag deposits. No further management of JH 53 is recommended.

JH 106:

JH 106 is located on a triangular shaped terrace in the Sugar Bottom Public Use Area bounded on the north by an access road and on the east and west sides by two intermittent streams (Zalesky, 1977). This site was first reported by Weichman (site form: date unreported). Site updates were provided by Zalesky (1977) and Miller (1979, 1980). Miller (1979, 1980) reports the site to be inundated by periods of high water. His collection occurred when pool elevations were around 670.2' and materials were located around 680'. Artifacts collected from the site area include side-notched projectile points and triangular points as well as other stone tools and pottery.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The site area was underwater, however, the area above the pool elevation showed signs of extreme erosion. Due to the high water elevation it was not possible to relocate JH 106 as it is exposed only during low pool elevations (670'). No further consideration should be given to JH 106 for management purposes.

JH 107:

JH 107 was recorded by Weichman in 1975 (site report). The site is located on the upper slope of a bluff immediately north of Sandy Beach Public Use Area at an elevation of 800 to 890' (Weichman, 1975). It is bordered on the north and east by an unnamed intermittent stream leading into West Hoosier Creek, to the south by Johnson County Road W4F and the ACOE boundary to the west. Materials found include one large scraper, waste flakes and fire-cracked rock.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The field presently appears to be fallowed with patches of grasses, oats, and corn stubble. Areas throughout the field have 5-10% ground visibility. The area was surface collected and no cultural material was found. JH 107 exhibits typical erosion due to cultivation on a moderate slope. Due to the meagre inventory of materials reported in the past and the lack of materials found in the most recent survey, JH 107 lacks significant research potential, no further testing is recommended and it should be withdrawn from active management.

JH 108:

JH 108 was first reported by Weichman (1975). Subsequent updates were provided by Zalesky (1977), Weichman (1977), Zalesky and Zieglowsky (1981), and GLARC, Inc. (1985). The site is situated on the Sandy Beach Public Use Area beach. Projectile points, debitage, scrapers and Weaver and Madison ware ceramics were collected. The site is reported to be destroyed from construction and severe erosion.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The beach and debitage is thought to have been trucked in for fill of the county road. Because of the erosion and translocation of site materials

making up JH 108, no further testing or site management is recommended.

JH 109:

JH 109 is located on the north side of the Hawkeye Wildlife Area, south of Johnson County Road E, and west of an unnamed drainage confluent to the Iowa River. The site was first noted by Weichman in 1975 (site form). Other references to JH 109 include Zieglowsky and Zalesky (1981) and Emerson et. al. (1984). Weichman (1975) and Zieglowsky and Zalesky (1981) incorporated surface collection techniques for their surveys and recovered several tools and cores as well as approximately 100 waste flakes. Fire-cracked rock was also noted at JH 109. Weichman (1975) mentions that the fire-cracked rock appeared as "intact fire hearths" but none of the other investigations note this phenomenon in their observations.

The Emerson et. al. (1984) investigation included both surface collection and six shovel tests. This survey yielded eighteen chert flakes. None of the investigations of JH 109 produced diagnostic material and therefore no cultural affiliation has been assigned to the site. The six shovel tests were placed in the wooded portion of the site east of the concrete foundation.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. A large piece of worked chert was found in the cultivated area west of the concrete foundation and two heat treated chert flakes were located north of the foundation. The western-most chert flake was found beyond the boundary of JH 109 as established by Emerson et. al. (1984).

Situated on the north side of the Hawkeye Wildlife Area which has been identified as a high potential zone, JH 109 was thought to have some intact deposits. A soil pit and bucket auger probe were performed to test the possibility of

buried surfaces. The following description was derived from these investigations.

Geomorphic Description:

Site JH 109 is located in the Hawkeye Wildlife Area on an alluvial fan at the base of a tributary flowing south into Coralville Lake (the Iowa River). Elevation is 705' (211.5m) A.M.S.L. The site is within a larger area composed of a complex suite of landforms including river terraces, colluvial footslopes, and coalescing alluvial fans. Vegetation includes low-growing, water-tolerant weedy species, some corn, and scrubby maple saplings. The area to the south (at 700', 210m A.M.S.L.) has been recently inundated as evidenced by varied debris. Local relief of the area is 150' (45m), inclusive of the upland region to the north. The immediate area is gently sloping (< 10°) to the south.

JH 109 is a site identified by Anderson and Overstreet (1980) as an alluvial fan. A soil pit was dug and bucket augering extended to 66" (165cm). At that depth, the core hole filled with wet sand making it impossible to probe further. The water table was encountered at 42" (105cm). No buried soil horizons were encountered. The soil is very moist and appears to be poorly drained.

The AP layer (formerly plowed) is coated with an organically enriched mixture of loamy sand. Munsell colors are: (a) moist, 10YR 5/4 (yellowish brown) and (b) dry, 7YR 7/3 (very pale brown). Organics are 10YR 3/1 (very dark gray). Texture is loamy sand and structure is very fine granular. When both dry and moist, the soil consistence is loose (non-coherent); when wet it is non-sticky and non-plastic. Soil pH is 8.0 (moderately alkaline). A clear, smooth boundary separates this horizon from the A1.

The A1 horizon extends from 4 to 6" (10-15cm). Munsell colors are: (a) moist, 10YR 4/4 (dark yellowish brown) and

(b) dry, 10YR 6/4 (light yellowish brown). Texture is fine sandy loam and structure is fine sub-angular blocky. Wet consistence is slightly sticky and slightly plastic. When dry, consistence is soft (weakly coherent) and when moist, very friable. Soil pH is 7.5 (mildly alkaline). A clear, smooth boundary occurs between the A1 and B1 layers. Several bright iron bands (7.5YR 6/8 reddish yellow) were observed.

The B1 horizon extends from 6 to 16" (15 to 40cm). Munsell colors are: (a) moist, 10YR 5/8 (yellowish brown) and (b) dry, 10YR 6/3 (pale brown). Texture is sandy loam and structure is fine sub-angular blocky. Consistence is soft when dry, very friable when moist, and slightly sticky and slightly plastic when wet. A few thin, discontinuous silt coatings (10YR 5/3, brown) appear on ped faces. Soil pH is 7.0 (neutral). A clear smooth boundary separates the B1 from the B2t horizon.

The B2t horizon extends from 16 to 24" (40-60cm). Munsell colors are: (a) moist, 10YR 5/8 (yellowish brown) and (b) dry, 10YR 7/6 (yellow). Texture is loamy sand and structure is fine sub-angular blocky. Consistence is soft when dry, very friable when moist, and slightly sticky and slightly plastic when wet. Silt coatings occur regularly on ped faces with a color of 10YR 7/2 (light gray). Soil pH is 7.0 (neutral). A clear, smooth boundary occurs between the B2t and C horizons.

The C horizon extends from 24 to 56" (60-140cm). Munsell colors are: (a) moist, 7.5YR 5/8 (strong brown) and (b) dry, 7.5YR 7/6 (reddish yellow). Texture is sand and structure is medium granular. When moist and dry, soil consistence is loose: when wet it is non-sticky and non-plastic. Soil pH is 7.0 (neutral). The remaining sequences are bucket auger extensions.

Stratum 6 extends from 56 to 60" (140-150cm). Munsell colors are: (a) moist, 7.5YR 6/8 (reddish yellow) and (b) dry, 7.5YR 7/8 (lighter reddish yellow). Texture is sandy

clay loam and structure is medium sub-angular blocky. When dry and moist the sediments are non-coherent, but when wet they are slightly sticky and slightly plastic. Soil pH is 7.0 (neutral).

Stratum 7 extends from 60 to 65" (150-162.5cm). Munsell colors are: (a) moist, 10YR 5/6 (yellowish brown) and (b) dry, 10YR 6/8 (brownish yellow). Texture is sandy clay loam and structure is medium sub-angular blocky. When dry and moist the sediments are non-coherent, but when wet they are slightly sticky and slightly plastic. A few iron concretions are found with a color of 7.5YR 5/6 (yellowish brown). Soil pH is 7.0 (neutral).

Stratum 8 appears to be a thin (1" or less) lens between layers 7 and 9 which are identical. Stratum 8 extends from 65 to 66" (162.5-165cm). Munsell colors are: (a) moist, 10YR 5/6 (yellowish brown) and (b) dry, 10YR 7/6 granular. When dry, this stratum is non-coherent. When moist, its consistence is loose and when wet, it is non-sticky and non-plastic. No paleosols were noted from the surface to a depth of 5.5'.

In conclusion, JH 109 has failed to yield any evidence of intact archaeological deposits. Further, no buried soils that could harbor evidence of habitation were found.

JH 110:

JH 110 is located north of Johnson County Road E on a secondary terrace at 720' A.M.S.L. and was recorded by Weichman in 1975 (site form). Erosion was severe at the time of the first (1975) collection and a hafted drill and waste flakes were found eroding out of a cut bank.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. It is possible that JH 110 could have been part of JH 109. Presently the site has been destroyed by borrowing for the nearby parking lot and road construction. Because of this no further testing or site management is recommended for JH 110.

JH 111:

JH 111 was first reported by Weichman in 1975 (site form) during a Johnson County Road Improvement Project. The site was located on the bluff top immediately east of a gravel road at an elevation of 800' (Weichman 1975: site form). The ridge is east of Plum Creek north of the Iowa River. At the time of collection the landscape was described as floral covered pasture with moderate to great erosion occurring in a snowmobile trail. Waste flakes were reported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The area is presently a fallowed field with a badly eroded surface. The access road cut was also present and inspected. No cultural material was found. Due to the severe erosion and lack of cultural material of JH 111, no further testing or site management is recommended.

JH 116:

JH 116, reported by Weichman in 1976 (site form), is located on a terrace east of Sugar Bottom Public Use Area at an elevation of 680 to 685'. The terrace appears as a finger-like interfluve in a large unnamed series of drainages east of the Public Use Area. Weichman (1976: site form) reported the site to be badly eroded from reservoir pool fluctuation.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69' ASL. The site was underwater, however, the terrace above the water table was extremely eroded. Due to the extreme erosion of JH 116, no further testing or site management is recommended.

JH 117:

JH 117 was first reported by Weichman in 1976 (site form). Additional subsequent reports were submitted by Miller (1979: site form), Zalesky and Zieglowsky (1981), Emerson et. al. (1984), and GLARC, Inc. (1985). The site is located on top of and along the eroded slopes of the northern-most sandy finger terrace in the Sugar Bottom Public Use Area. Surface collections cumulatively yielded hundreds of items of lithic debris, projectile points, other tools and pottery. The terrace is described as bad, severe erosion from road construction and flooding.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The site was underwater but the area above the water was severely eroded. All current indications confirm that previous investigator's conclusions regarding the destruction of sites on these terraces are correct. No additional work should be conducted at Sugar Bottom. However, because of the large sample of cultural diagnostics recovered here, and, the high visitor use, JH 117 is a good candidate for future interpretation.

JH 122:

Zalesky reported JH 122 in 1977 (site form). The site is located on the south terrace of the Iowa River, extending from an unnamed north flowing tributary on the east to a point where the terrace is pinched out by the limestone bluffs on the west (Zalesky 1977). Zalesky's surface collections yielded 30 projectile points, 21 lithic tools and 16 pottery sherds including 6 rim sherds.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.53' ASL at the time of survey and the majority of the JH 122 terrace was underwater. However, exposed portions of the

terrace were extremely eroded. It is unlikely that JH 122 harbors an undisturbed contexts. Further, the site is often inundated. No further investigation is recommended at JH 122.

JH 123:

JH 123 was reported by Zieglowsky and Zalesky (1981) as a lithic scatter of unknown cultural affiliation. The site is located on the north shore of a drainage on the east side of Coralville Lake. Its research potential at that time was classified as low. JH 123 was relocated during two 1986 visits and lithic debris and diagnostic bifaces were collected. Fire-cracked rock was observed on the surface of the site. However, all cultural materials observed were found as a lag deposit on a badly eroded slope where the matrix was removed during high lake levels. In some places artifacts are directly on top of exposed bedrock.

Great Lakes Archaeological Research Center, Inc. revisited the site a few times in 1986. The pool elevation was 683.10' to 696.40'. Flakes and Archaic points were found on the eroded shoreline. At 688,01' bedrock was exposed at the water level. Materials extended along the inlet shoreline. There was a possibility that some of the site may have extended to undisturbed upslope contents. During the sites' last visit three rows of four shovel test probes (10m apart) were placed along the wooded slope. All twelve shovel tests were negative. Two of the holes were expanded for geomorphic interpretation. Due to the extreme erosion of JH 123 and the lack of artifacts upslope, no further testing or site management is recommended. The following geomorphic description was derived from subsurface investigations.

Geomorphic Description:

Site JH 123 (1) is located at an elevation of 710' A.M.S.L. (213m) on a convex side slope of an upland interfluve. The side slope faces south-southwest and is directly across the Iowa River from sites JH 312 and 317. About 100' (30m) to the west of the site, a tributary drainage flows into the Iowa River. Slope at the site is approximately 30 to 35°. Local relief of the upland ridge is about 150' (45m). Surface runoff appears more rapid here than at other upland sites and is explained as a function of slope angle. Soils appear to be very well-drained. Vegetation is deciduous forest of oak, hickory, birch, a few maple and several large cedar trees. The area sampled was well above (50', 15m) debris deposited by recent high water levels in the reservoir. The area does not appear to have been plowed or otherwise disturbed. Parent material is loess.

Samples of this soil were taken from shovel probe pits dug to 12" (30cm) and then extended vertically with a bucket auger. Despite recent heavy rains, the soil was drier than at previously tested sites (272, 317, 331, 312). The drier conditions can be explained by rapid surface runoff (function of steeper slopes). No plow zone was observed and forest vegetation was not as disturbed as it was at other sites. Several very large oaks were observed at this site.

The A0 horizon extends from 0 to 1/4" (.625cm). It was not field tested but consists of varied undecomposed leaf litter typical of a deciduous forest environment. The boundary is clear and smooth to the A1 horizon.

The A1 horizon extends from 1/4 to 2" (.625-5cm). Munsell colors are: (a) moist, 10YR 3/3 (dark brown) and (b) dry, 10YR 4/3 (dark yellowish brown). Soil texture is silt loam and structure is fine granular. Soil consistence is soft (weakly coherent, falls apart with slight pressure when dry). The soil is very friable when moist, and slightly sticky and slightly plastic when wet. Soil pH is

5.5 (strong to medium acid). The A1 horizon has a gradual smooth boundary to the E horizon.

The E horizon extends from 2 to 7" (5-10cm) in depth. Munsell colors are: (a) moist, 10YR 4/4 (dark yellowish brown) and (b) dry, 10YR 5/4 (yellowish brown). Texture is silt loam and structure is fine to medium granular. Soil consistence is soft (weakly coherent, falling apart with slight pressure) when dry, very friable when moist and slightly sticky and slightly plastic when wet. Soil pH is 6.5 (slightly acid). The E horizon has a gradual, smooth boundary to the B1 horizon.

The B1 horizon (transition horizon, more B than A) extends from 4 to 14" (10-35cm). Munsell colors are: (a) moist, 10YR 5/4 (yellowish brown) and (b) dry, 10YR 6/4 (light yellowish brown). Soil texture is silty clay loam and structure is medium angular to sub-angular blocky. When wet, the soil in this horizon is sticky and slightly plastic, when moist it is friable and when dry, it is firm. Very small (< 1/8 diameter) black iron or manganese concretions are sparsely distributed within this horizon. Soil pH is 5.5 (strong to medium acid). A gradual smooth boundary occurs between the B1 and B2t horizons.

The B2t horizon extends from 14 to 28" (35-70cm). Munsell colors are: (a) moist, 10YR 6/8 (brownish yellow) and (b) dry, 10YR 7/6 (yellow). Soil texture is clay loam and structure is medium angular to sub-angular blocky. When wet, the soil is sticky and slightly plastic. When moist it is friable and when dry it is hard (difficult to break with fingers). Thin, discontinuous clay skins (argillans) are found on ped faces. Soil pH is 5.5 (strong to medium acid).

None of the soil horizons effervesce following application of a 14% hydrochloric acid solution. Parent material is loess. Taxonomic classification is Typic Hapludalf (fine silty mixed mesic), with native vegetation of deciduous forest.

The soil profile observed and analyzed at JH 123 (2) exhibits the same characteristics as those at site 123 (1), with a difference noted only in development of soil horizons. The horizonization at JH 123 (2) is greater and is explained by differences in degree of slope (35-40^{o} at 123 (1) vs. 15^{o} at 123 (2)).

JH 124:

JH 124 was first reported by Miller in 1979 (site form). Subsequent investigations were conducted by Zalesky and Zieglowsky (1981), Miller (1980) and GLARC, Inc. (1985). The site is located on a severely eroded shoreline of a small point in Sugar Bottoms Public Use Area east of the main beach area. Lithic debitage, projectile points (including an Agate Basin point), and other stone tools were found during the several surface collections.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The site was underwater. Review of previous investigations and analysis of the exposed area leaves little doubt that erosion has destroyed any context at JH 124. Thus, the only management consideration for this site is future interpretation. High visitor traffic at Sugar Bottom justifies such consideration.

JH 125:

Known as Sugar Bottom Park II, JH 125 was first reported by Miller in 1976 and updated in 1980 (site form). The site is located on the east side of the confluence of an unnamed series of drainages and the Iowa River. The cultural materials found here include several "pounds" of waste flakes, several projectile points and pot sherds.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'.

The site area appeared to be underwater. No cultural material was found. The surface above the water table is extremely eroded. Due to these factors, JH 125 does not possess significant research potential.

JH 126:

JH 126 was initially reported by Miller (site form). Later reports include Zalesky (1977), Zalesky and Zieglowsky (1981), and GLARC, Inc. (1984). The site is located on the top of a substantial ridge at the end of an old road on the north side of the confluence of an unnamed inlet and the Iowa River.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The site is underwater and the shoreline above the water is severely eroded. The site could only be investigated at low pool elevations. Given the nature of the exposed landscape, however, it is apparent that JH 126 has been destroyed by erosion. No further investigations are warranted.

JH 127:

JH 127 is located on a terrace extending from an unnamed drainage on the west. It was recorded by Zalesky in 1977 (site form). The area consists of sandy ridges, remnant point bars interspersed with mud flats (Zalesky, 1977). Material collected from JH 127 include 18 projectile points, 18 lithic tools, waste flakes and grit tempered pottery. Culturally the materials range from Archaic to Late Woodland.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation at the time of collection was 690.53' ASL. The terrace was underwater and the area above the pool level is extremely eroded. Due

to the erosion of JH 127, no further testing or site management is recommended.

JH 128:

Known as the University of Iowa Field Campus Site, JH 128 was recorded by Miller in 1977 (site form) and the report was updated that same year by Zalesky (1977: site form). Miller contributed another update in 1980 (site form). The site is located along the shore of the Iowa River at the base of a south facing slope and on the west side of a drainage entering the reservoir. The area is southwest of the cabin for handicapped children and across the reservoir opposite the radio towers on the field campus shoreline (Miller, 1977: site form). Miller (1980: site form) notes his collection comes from a severely eroded reservoir bank near the waters edge, 670-672' ASL. Materials collected were recorded by weight and include "pounds" of waste flakes and pottery sherds. Also collected were about 25 stone tools including projectile points. According to the reports the material ranged from Archaic to Middle Woodland.

Great Lakes Archaeological Research Center, Inc. revisited the area in 1986. The pool elevation was 686.62'. The entire terrace was underwater. The ridge slope was completely eroded away of soil matrix. All that remained exposed on the surface was bedrock and coral cobbles. Due to the extreme erosion of JH 128, no further testing or site management is recommended. This site is essentially permanently inundated.

JH 141:

JH 141, reported by Zalesky in 1977 (site form), is located on a terrace at the mouth of a small west flowing intermittent drainage to the Iowa River, about 1/2 mile

below the Lake MacBride Dam (Zalesky, 1977). Zalesky (1977) collected materials from both sides of the drainage, but the majority of artifacts were found along the north side. Four projectile points and five stone tools having Early-Middle Woodland affiliation were reported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62' ASL. Severe erosion is present on both sides of the drainage. The south slope is steeper than the north side. Both sides of the drainage were collected and no cultural materials were found. Due to the severe erosion of JH 141, no further testing or site management is recommended.

JH 142:

Known as Field Campus III, JH 142 was first reported by Zalesky in 1977 (site form) and later updated in 1979 by Miller (two site forms). The site is located on the north shoreline of the Coralville Reservoir on the south shore of the Lake MacBride field campus about 1/8 mile west of JH 128 at the first inlet on the southern side (Zalesky, 1977; Miller, 1979). Both collectors report waste flakes and undefined projectile points.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. The shoreline was subjected to extreme erosion and no cultural material was found., Due to the extreme erosion of JH 142, no further testing or site management is recommended.

JH 144:

JH 144 was first reported by Zalesky in 1977 (site form). The site is situated along a point bar and meander scar on the north bank of the Iowa River (Zalesky, 1977). The site consisted of one projectile point and scattered

"blank" flakes. Zalesky (1977) reports the site to be periodically inundated by flood water and subjected to wind erosion.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The exposed shoreline is extremely eroded and the erosion extends 20-25 feet above the present pool elevation. Some of the point bar is still underwater. No cultural material was found. Due to the extreme erosion of JH 144, no further testing or site management is recommended.

JH 146;

JH 146 was first reported by Zalesky in 1977 (site form). The site is located on the north shore of Coralville Reservoir just upstream from the mouth of West Hoosier Creek. According to Zalesky (1977), the site is normally underwater except during periods of extremely low pool elevations. One axe/celt was found by Zalesky and he reports that other private collections include a large number of small, triangular notched and unnotched points.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85' ASL. The area was underwater but exposed and nearby sites like JH 43 are extremely eroded. Due to the extreme erosion of the terrace associated with JH 146 and due to high water levels and wave action, no further testing or site management is recommended.

JH 150:

Known as McAllister Creek III, JH 150 was first reported by Miller in 1976 (site form). Later updates were made by Zalesky (1977) and Miller (1978, 1980: site forms). The site is on a stream terrace bounded by two unnamed northern affluents to the Iowa River, across the stream from

13 JH 51 (Zalesky, 1977). Miller (1980: site form) reports collecting the site when the reservoir level was 670' and the materials were at 680-690' with severe erosion at the lower elevation.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. Extreme erosion has occurred 10 to 15' above the water elevation along the ridge slope. Fire-cracked-rock and lithic debris was found on the eroded silts and clays. Tree roots are becoming exposed on the ridge top. Due to the extreme erosion of JH 150, no further testing or site management is recommended.

JH 152:

JH 152 was first reported by Zalesky in 1977 (site form) and updated by Miller in 1980 (site form). The site is located on the north bank of the Iowa River just below a farmstead bordered by two ravines at the west and east (Zalesky, 1977). Miller (1980) notes that his collection was done during a lake level of 670' and materials were found from 670-690'. Materials collected and reported included waste flakes and weathered grit tempered pottery.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.53'. The ridge toe surface is eroded silt. Four poured concrete foundations are still visible from farmsteads. Cultural material was found along the terrace between both ravines and on the terrace across the east ravine (drainage). Both modern historic and non-diagnostic prehistoric debris was found mixed on the eroded surface. Due to the erosion of JH 152, no further testing or site management is recommended.

JH 153:

JH 153 is located on both the first terrace and a steep bank associated with an unnamed northern affluent that borders to the west and was identified by Zalesky (1977: site form). It is across the affluent from JH 36 and across the Reservoir from JH 122. The material collected by Zalesky was included with JH 36 (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. There was severe erosion along the shoreline extending 15-20' above the water elevation. Tree roots near the top of the ridge were exposed. Cultural material was found along the eroded slope and near a ridge top. Due to the extreme erosion of JH 153, no further testing or site management is recommended.

JH 155:

JH 155 was first noted by Zalesky in 1977 (site form) and subsequently the site form updated by Miller (1980: site form). The site is located on the east side of a drainage that enters the lake at the bend of the Iowa River (Miller, 1980: site form). The site is bounded by a rock outcrop on the east and extends 25 yards up the small drainage (Zalesky, 1977). Miller (1980) reports his collection coming from about 680' 10' above lake level. Materials collected included waste flakes and a drill.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation at the time of collection was 685.85'. Three chert flakes were found on an extremely eroded surface with bedrock exposure at and above the water level. Due to the extreme erosion of JH 155, no further testing or site management is recommended.

JH 156:

JH 156 is coincident with a point bar and meander scar on the south bank of the Iowa River, just downstream from JH 127. It was first reported by Zalesky in 1977 (site form). Cultural material was found scattered along the small ridge tops and the collection was combined with JH 127 (Zalesky, 1977) at the time of Zalesky's report (1977), the site was periodically underwater from pool elevation fluctuations and was subjected to wind erosion.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The landform was underwater but its location was apparent because of trees sticking out of the water. At an estimated elevation of 670', JH 156 can be considered to be permanently inundated. No further management activities are recommended.

JH 157:

JH 157 was first reported by Zalesky and is located on the south shore of Coralville Reservoir and on the east bank of shallow gully (Zalesky, 1977). It is located west of JH 33 on the same floodplain terrace.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. The terrace was surface collected. The area is subject to wave cutting erosion and flood deposit during different periods of water fluctuation. No cultural material was found. Due to the erosion and instability of JH 157, no further testing or site management is recommended.

JH 158:

JH 158 is located across the bay formed by the gully of an unnamed drainage from JH 157. It was recorded by Zalesky

in 1977 (site form). The area includes the narrow, pointed river terrace and the bank area between the two drainages converge near JH 157. The site was noted to be eroding rapidly due to fluctuating lake levels a decade ago (Zalesky, 1977). Cultural materials collected included point fragments, waste flakes and shatter.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. The shoreline showed signs of extreme erosion. No cultural material was found in association with JH 158. Due to the extreme erosion of JH 158, no further testing or site management is recommended.

JH 159:

The first report of JH 159 was provided by Zalesky in 1977 (site form). The site is located at the west end of the same terrace of JH 158. It is bordered on the west by a small ravine. Materials collected included flakes, shatter and ceramic bodysherds which were incorporated with the collections from JH 33 (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. Extreme erosion was present at this site area, virtually identical to conditions at JH 158. No cultural material was found in association with JH 159. Due to the extreme erosion of the site area of JH 159, no further testing of site management is recommended.

JH 171:

This site is situated in a cultivated field approximately 1/2 mile northwest of the Iowa River Highway 218 bridge on the north and east. First recorded by Zalesky in 1977, the site yielded two projectile points and abundant waste flakes (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. JH 171 is outside of the ACOE boundary and should be removed from the Coralville Management Plan. Surface collection revealed only a few scattered waste flakes during the 1986 evaluation.

JH 172:

JH 172 was reported by Zalesky in 1977 (site form), and was located in a road cut from a field access road. The site is on the north side of an unnamed south flowing tributary of the Iowa River just north of JH 171. The material collected included one projectile point, two biface fragments and scarce chipping debris. At the time of collection the site was subject to extreme pool elevation flooding and also damage from farm equipment traveling between fields (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. JH 172 is outside of the ACOE boundary and should be removed from the Coralville management program.

JH 173:

JH 173 was first reported by Zalesky in 1977 (site form). The site is a sandy knoll in the same cultivated field as JH 171. No material was collected when reported but material was previously found (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. A few flakes were collected during the visit. JH 173 is outside of the ACOE boundaries and should be omitted from the Coralville Management Plan.

JH 180:

JH 180 was recorded by Zalesky (1977: site form), in a cultivated field on top of a hill, east of the County Road

and north of JH 179. Cultural material was most abundant in the southwest corner of the field (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. JH 180 is outside of the ACOE boundary and should be omitted from the Coralville Management Plan.

JH 187:

JH 187 was first reported by Zalesky in 1977 (site form) and later visited by Miller (1981: site form). The site is located on the first terrace on the eastern side of Plum Creek, north of the County Road between 700 to 710' A.S.L. (Zalesky, 1977; Miller, 1981). Numerous chert flakes and cores and a small point tip was reported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. A surface collection was performed in the cultivated field and chert flakes were found. The site was also subjected to subsurface testing potentials for buried occupation levels. The following description summarizes the results of subsurface investigations.

Geomorphic Description:

Site JH 187 is located in the Hawkeye Wild Life Area on an alluvial fan at the base of Plum Creek, a tributary flowing south into Coralville Lake (the Iowa River). The site is @ 600' (180m) north of JH 354. A smaller tributary flows west into Plum Creek about 400' (120m) north of the site. Elevation is 704' A.M.S.L. (211m). The site is within a larger area containing a complex suite of landforms including river terraces, colluvial footslopes, and coalescing alluvial fans. Vegetation includes low-growing, water-tolerant weedy species. A soybean field is immediately adjacent east of the site. The soybeans grade

into corn and eventually into deciduous forest on the hillslope to the east. The area appears to have been inundated recently when reservoir level reached 706' (211.8m). Local relief of the area is as great as 150' (45m), including the upland region to the north. The immediate area is gently sloping (@ 2-3°).

A thin (< 1/32") layer of alkali covers the sediments near (within 10', 3m), but not directly on the sampled area. It appears to be agricultural lime in from the corn and soybean fields directly upslope and east of the sampled area.

Stratum 1 extends from 1 to 3" (2.5-7.5cm). Munsell colors are: (a) moist, 10YR 3/2 (very dark grayish brown) and (b) dry, 10YR 4/2 (dark grayish brown). Texture is silt loam and structure is medium to sub-angular blocky. When wet it is slightly sticky and slightly plastic. When moist it is very friable and when dry, loose or noncoherent. Soil pH is 6.3 (slightly acid). The boundary between Strata 1 and 2 is indistinct.

Stratum 2 is very unusual. It has a higher pH than other samples in the area (7.5, mildly alkaline). It also has a bluish-gray cast and iron bands indicating anaerobic conditions (5YR 5/6). A strong odor of decomposition was observed. This stratum extends from 3 to 5.5" (7.5-13.8cm). Munsell colors are: (a) moist, 10YR 2.5/1 (black) and (b) dry, 10YR 3/2 (very dark grayish brown). Texture is silt loam and structure is medium sub-angular blocky. When wet, it is slightly sticky and slightly plastic., When moist, it is very friable and when dry, loose or noncoherent. A clear smooth boundary exists between 2 and 3.

Stratum 3 extends from 5.5 to 7.5" (13.8-18.7). Munsell colors are: (a) moist, 10YR 3/3 (dark brown) and (b) dry, 10YR 5/2 (grayish brown). Texture is loam and structure is medium sub-angular blocky. When moist it is very friable and when dry, loose or noncoherent. When wet,

it is slightly acid. A clear smooth boundary occurs between 3 and 4.

Stratum 4 extends from 7.5 to @ 48" (18.7-120cm). Munsell colors are: (a) moist, 10YR 4/3 (brown to dark brown) and (b) dry, 10YR 5/3 (brown). Texture is silty clay loam and structure is medium to sub-angular blocky. When wet, its consistence is slightly sticky and slightly plastic. When moist it is friable and when dry, soft or noncoherent. Soil pH is 5.9 (medium acid). The water table was encountered within this stratum at a depth of 18" (45cm). Boundaries between the subsequent strata are unknown as the pit was extended by coring with the bucket auger and attachments.

Stratum 5 was delineated from stratum 4 on the slightly different basis of color. It occurs at 48" (120cm) from the surface. Munsell colors are: (a) moist, 10YR 4/4 (dark yellowish brown) and (b) dry, 10YR 7/4 (very pale brown). Stratum 6, at 50" (125cm) shares all characteristics of stratum 5 with the exception of iron bands (5YR 5/8) and dark weathering bands 10YR 2.5/1.

Stratum 7 at 57" (1.4m) is readily distinguishable by the presence of course grained, sub-angular to rounded sand particles (< 1/8" in diameter) in a fine-grained matrix. Moist and dry consistence is noncoherent and it is non-sticky and non-plastic. Soil pH is 6.0 (medium to slightly acid).

Stratum 8, first encountered at 82" (2m) is oxidized sandy clay loam. Structure is medium sub-angular blocky. Munsell colors are: (a) moist, 7.5YR 4/4 (brown to dark brown) and (b) dry, 7.5YR 5/8 (strong brown). Dark concretions (10YR .5/1) and iron stains (5YR 5/8) are present. Soil pH is 6.5 (slightly acid to neutral). If wet, the matrix is slightly sticky and slightly plastic. When dry and moist it is very friable and weakly coherent.

Stratum 9, at 85" (2.1m), is very mottled and gleyed clay loam. Munsell colors are: (a) moist, 10YR 6/8

(brownish yellow) and (b) dry, 10YR 5/4 (yellowish brown). Texture is clay loam and structure is medium sub-angular blocky. When wet the matrix is slightly sticky. When dry and moist, it is soft and friable. Soil pH is 6.5 (slightly acid to neutral). Stratum 10 (87") is exactly like stratum 9, but is more gleyed.

Stratum 11, at 117" (2.9m), is a sandy layer with fine granular structure. Soil pH is higher than the previous strata (7.0, neutral). Munsell colors are: (a) moist, 10YR 5/6 (yellowish brown) and (b) dry, 10YR 6/8 (brownish yellow). The final sample at 123" (3.1m) is the same as strata 10. No buried soils were noted, and thus, no further management recommendations are made.

JH 191:

JH 191 was first reported by Zalesky in 1977 (site form). Additional site data were recorded by Miller (1979) and GLARC, Inc. (1984). The site is located northwest of JH 52 on the same terrace above McAllister Creek (Zalesky, 1977), just east of a ravine formed by a small tributary on a moderate slope (GLARC, 1984). The site lies in the area west of old Highway 218. Miller (1980) reports 1/2 pound chert fragments, chips and several scrapers. GLARC, Inc. (1984) found one bifurcate point base, one biface fragment and chert flakes. All the previous investigators report JH 191 subject to severe erosion and periodic flooding.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.53'. The floodplain was primarily underwater with the exposed area eroded. Portions of the site should have been exposed as the legal description places it at or above the 700' elevation. No cultural material was found and due to the extreme erosion of JH 191, no further testing or site management is recommended.

JH 192:

JH 192 is located on a sandy hillslope above a broad marshy ravine in the uplands about 1/8 mile from McAllister Creek (Zalesky, 1977). The site was reported by Zalesky in 1977 (site form). When he discovered artifacts during the construction of a concrete road for a projected housing development.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. JH 192 is outside of the ACOE boundaries and should be omitted from the Coralville Management Plan.

JH 193:

Zalesky reported JH 193 in 1977 (site form). The site is in a cultivated field located on the crest of a ridge about 1/2 mile north of the Iowa River. The field is about 10 acres and the material (unreported) is evenly scattered about.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. JH 193 is outside of the ACOE boundary and should be omitted from the Coralville Management Plan.

JH 195:

JH 195 is on a small terrace on the southeast bank of an unnamed eastern affluent of McAllister Creek and was reported by Zalesky in 1977 (site form). The site is sit ted in a cultivated field that is adjacent to a pr ounced ridge. Cultural material (unreported) is concentrated at the base in an area of approximately one acre (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. visited the site in 1986. The drainage is steeply cut and

eroded. No material was found in the cut spoil or cultivated area. Due to the extreme erosion of JH 195, no further testing or site management is recommended.

JH 196:

Reported by Zalesky in 1977 (site form), JH 196 is situated at the base of a steep bluff. The bluff is being eroded by a meander of McAllister Creek. It is on the east bank and the eroded bluff extends to the south and southwest, however, the cultural remains (unreported) are found along the northern part of the bluff. In addition to the erosion from McAllister creek the site is also subjected to periodic flooding during high pool elevation.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.53'. The floodplain showed signs of extreme erosion and surface collection failed to yield any cultural debris. The drainage to the northeast has a steep vertical cut of 20' above the floodplain. Due to the extreme erosion at JH 196, no further testing or site management is recommended.

JH 197:

JH 197, reported by Zalesky in 1977, found along the eastern terrace of McAllister Creek near the site of an abandoned farmstead. Cultural materials (unreported) were found along the western slope of the hill in an area subjected to flooding during high pool elevations (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 while the pool elevation was 690.53'. Some of the floodplain was underwater making it difficult to navigate the McAllister Creek channel. The eroded floodplain was surface collected but no cultural material was found. Given the extreme erosion at JH 197,

and the absence of cultural material, the site is not considered significant. No further testing or site management is recommended.

JH 198:

JH 198 is located on a terrace on the south bank of the Iowa River just east of the old Curtis Bridge abutment. Zalesky recorded the site in 1977, indicating that the area is sandy and subject to erosion due to pool elevation fluctuations. Before the reservoir silted in, there was a flowing spring nearby (Zalesky, 1977). He also stated that the boat dock was constructed on part of the site and the exposed part is being eroded from pedestrian traffic and fluctuating pool levels. Cultural material from the site is unreported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 while the pool elevation was at an elevation of 690.53'. The site area is stripped by erosion. No cultural material was found. Due to the extreme erosion of JH 198 from pool fluctuations and pedestrian traffic, it is recommended that no further testing or site management be done.

JH 200:

JH 200 was first reported by Zalesky in 1977 (site form). The site is situated on a terrace on the east bank of the Iowa River, bordered by ravines to the north and south (Zalesky, 1977). The site is described as being near the southern ravine. Cultural material collected from the site is unreported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69' and shoreline erosion of the terrace extends 20' above this point. Bedrock is exposed along the entire terrace

shoreline and no cultural material was found. Due to these factors, no further testing or site management is recommended at JH 200.

JH 203:

JH 203, formerly 13 JH 20, is a rockshelter first reported by Caldwell (1956: site form). Caldwell (1961) describes the site as "a small rockshelter formed by an abrupt overhang of the limestone rimrock overlooking the westernmost meander of Turkey Creek." Three shallow test pits of unreported depth were dug by Caldwell. He described the excavations as "a brown-black organic matrix containing abundant rock fall, small amounts of shattered bone, and fragments of charcoal" (1961). These excavations did not yield any other cultural material. Supplemental information includes Ruppe/McKusick (1960: site form) and Weichman and Tandarich (1974).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The first step consisted of locating local informants. The interviews included Les Haraput and the Allard family. Les Haraput informed us that he first came upon the shelter while fox hunting. He provided directions to the site along the fence line which now belongs to the Allards. The Allards' were contacted to acquire landowner permission for access to ACOE property. Mrs. Allard told me that her children used to play in the shelter but no cultural material was found.

To locate JH 203 follow the Allard tract to the Turkey Creek floodplain. Follow the limestone bluff to the edge. The bluff is approximately 50' from the gorge. JH 203 is outside of the ACOE boundary and should be removed from the management plan.

Geomorphic Description:

The rockshelter is formed in a small promontory which extends toward the river from a dolomite bedrock ridge. The Turkey Creek floodplain is directly below the ridge. The rockshelter faces southeast and is littered with breakdown (angular fragments) from the roof. The dolomite is buff to light gray, fossiliferous, and flaggy. No joints or bedding planes are evident in the exposed ridge. A thin coating of travertine was observed on the back walls of the shelter. Dimensions of the rock shelter are as follows: 4m long at the base, 2.7m from the outer ceiling of the overhang to the floor, 1m from the inner ceiling of the overhang to the floor, and 3.1m in depth.

JH 204:

JH 204 was first recorded in 1956 by Caldwell (site form). The site was identified as a rock shelter, described by Caldwell as a limestone overhang creating a long shallow shelter. As part of his work at Coralville Reservoir Caldwell dug one test pit in the shelter but found no cultural material (1961).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The overhang of this very small shelter overlooks Turkey Creek which is approximately 200 yards south of JH 203. No cultural materials have been found at JH 204 and it is not clear as to why this location was designated as an archaeological site. In any event, JH 204 is not eligible for the National Register of Historic Places, is not being impacted by lake operations, and requires no further management considerations. Further, JH 204 is outside of the ACOE boundary and should be omitted from the Coralville Management Plan.

JH 205:

JH 205 was recorded in 1956 during the survey and testing operations conducted by Caldwell (site form). Site data were later incorporated in a published report by the recorder (Caldwell, 1961). The site is described as situated on a low, triangular terrace above the narrow Iowa River floodplain. The site is adjacent to a high limestone bluff forming the eastern margin of the Crosheck River flat.

Caldwell (1961) sampled the site with a series of trenches and pits using a five foot grid. Four additional test pits were dug on the eastern portion of the site. Artifacts recovered included one triangular point, waste flakes, projectile point fragments, a full grooved ax, hammerstones, pottery and historic European material. The pottery has been reported as Woodland and Oneota.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The ridge slope is extremely eroded, red clay is exposed, and the slope is scalloped from water table fluctuations. Chert shatter was found on the surface but was not determined to be cultural material. Because of the extreme erosion no undisturbed contexts remain and JH 205 requires no further testing or management. Cultural materials from Caldwell's excavations, are housed at the Smithsonian Institution.

JH 206:

JH 206 was reported by Caldwell in 1956 (site form), and later updated by Ruppe (1960). The site is located on an exposed knoll 300' east of the Iowa River, 500' north of the west end of the county road servicing the Eugene Crosheck farm, and 350' north of the cultivated field. Chipping debris was exposed in the road cut and extends 200' north along the crest of a low ridge paralleling the Iowa River. Caldwell (1961) stated that his limited testing produced no definable artifacts but that the lithic material

comes from a surface of dense loessic clay just below the sod line. Materials found included the basal fragment of a corner-notch stemmed point and a significant amount of debitage.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 at which time one broken chert flake was found on the exposed eroded ridge slope. The top of the knoll was shovel tested at 10 meter intervals because the ground surface was not visible. Six shovel test probes were dug along the length of the ridge top. No cultural material was found on the ridge top. Due to erosion and the lack of cultural materials located on the ridge top, no further testing or site management is recommended.

JH 207:

JH 207 was first reported by Caldwell in 1956 (site form). The site was revisited by Ruppe (site form by McKusick) in 1960. It is located 1/4 mile west of western terminus of Crosheck access road and /8 mile north of same datum (Caldwell, 1956: site form). JH 207 is denoted by a scanty mussel shell midden accumulated on a narrow alluvial flat formed by a small, west flowing tributary of the Iowa River (Caldwell, 1961). Limited testing by Caldwell revealed no artifacts.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The entire shoreline was eroded at least 20' above the lake level. The shoreline is covered with coral cobbles. No cultural material was found. Due to the extreme erosion of JH 207, no further testing or site management is recommended.

JH 208:

JH 208, reported by Caldwell in 1956 (site form), was subsequently investigated by Ruppe (site form by McKusick) in 1960. The site is located 1/8 mile west of the western

terminus of Crosheck access road and 100' north of the same datum on fence line (Caldwell, 1956: site form). No testing was done, but a small nondefinitive surface collection was found (Caldwell, 1961). The surface collection included chipping debris and point fragments on the crest of a high ridge above, and just east of, the Iowa River (Caldwell, 1956: site form). Ruppe (1960) found chipping debris but no artifacts.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The area west of the ACOE boundary (fenceline) north to the ravine was surface collected. The surface is primarily devoid of ground vegetation and appears disturbed. The area between the farm road and the ravine was also shovel tested at 10m intervals. Two rows of four holes were dug and no cultural material was found. Due to the present ground disturbance and the lack of cultural material west of the ACOE boundary of JH 208, no further testing or site management is recommended.

JH 211:

JH 211 is situated in a cultivated field on the west bank of an unnamed northern affluent of the Iowa River (Zalesky, 1977). Recorded by Zalesky, this site is located northwest of JH 36 at a higher elevation. Zalesky (1977) reports the site area was cultivated some years and underwater during other times.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 while the pool elevation was at 680.69'. The site area is undergoing the same type of erosion encountered throughout the reservoir. Owing to the extreme degradation of JH 211, no further testing or site management is recommended.

JH 212:

JH 212 was first noted by Zalesky in 1977 (site form). The site is in a cultivated field in the uplands just north of the Iowa River, bounded by U.S. Highway 218 (now Highway 965) to the west. Cultural material was found scattered over a five acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The area was disturbed because of cultivation and subsequent rill erosion. The entire site was surface collected and several chert flakes were found. It was determined that JH 212 is outside of the ACOE boundary and thus should be dropped from the Coralville Management Plan.

JH 226:

JH 226 is located in a cultivated field about 1/4 mile upstream from an unnamed affluent of the Iowa River on a low terrace in the southwest corner of a larger field. The site was discovered by Zalesky and was recorded in 1977 (site form).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 and found the cultivated field to be outside of ACOE land. As a result, JH 226 should be removed from the Coralville Management Plan.

JH 228:

JH 228 is situated in a cultivated field about 1 mile upstream from the Sandy Beach Public Use Area. Reported by Zalesky, the site is on the northwest bank of Hoosier Creek (1977). Its legal description places it on the west side of a peninsula interfluve to the floodplain of Hoosier Creek at its northern bend. Cultural material was not reported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. The shoreline and cultivated areas were surface collected.

The entire area shows erosion due to pool fluctuations. No cultural material was found. Due to erosion and lack of cultural debris, no further testing or site management is recommended for JH 228.

JH 231:

Reported by Zalesky in 1977 (site form), JH 231 is located on the west side of the Iowa River just across the Lake MacBride spillway (Zalesky, 1977). One biface was reported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.40'. Both sides of the inlet exhibit extreme steep erosion at least 20' above the water plane. No cultural material was found. JH 231 is thus considered insignificant and no further testing or site management is recommended.

JH 232:

JH 232, reported by Zalesky in 1977 (site form), is coincident with a point bar and meander scar complex on the inside of the river bend, southwest of JH 141. Cultural material (unreported) was obtained from an area of relief (point bar ridges ?) (Zalesky, 1977). The site area is just north of a drainage at the end of a field campus road.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. The exposed floodplain was extremely eroded and partially underwater. No cultural material was found. Due to the extreme erosion of JH 232, no further testing or site management is recommended.

JH 240:

JH 240 was first reported by Zalesky in 1977 (site

form). The site is found on the northern-most point of the same shoreline as JH 200 and directly across an unnamed northern affluent from JH 51 on a narrow terrace extending along the bluff face (Zalesky, 1977). Material collected was unreported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.53'. The entire shoreline on the reservoir side is eroded to bedrock at least 20' above the water table. On the northern point three flakes were found on the eroded shore. The limited data and severe erosion of JH 240 warrant the conclusion that this site has very low research potential. No further testing or site management is recommended.

JH 243:

JH 243 was first reported by Zalesky in 1977 (site form). The site is a terrace on the west bank of McAllister Creek, bordered on the west by an intermittent stream that joins McAllister Creek just below the site. Cultural material (unreported) was washed out of the terrace on the southeast scarp (Zalesky, 1977).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The west bank of McAllister Creek is badly cut. North of JH 243 there is a steep bedrock exposure. No cultural material was found. JH 243 is completely destroyed and no further testing or site management is recommended.

JH 247:

JH 247 is located in a cultivated field atop a bluff just to the south of the Iowa River, Highway 218 Bridge. Reported by Zalesky in 1977 (site form), JH 247 bordered on the east by the railroad cut of the present C.R. and I.C. Railroad and is truncated on the west by an old railroad cut

(Zalesky, 1977). Zalesky stated that the site was partially lost when the old railroad cut was made. Cultural material was not described.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The area was not cultivated, however, many areas had at least 5% surface visibility. Surface collection was negative and the site was not relocated. However, there were obvious signs of earth moving and disturbance, probably associated with previous railroad construction and cultivation. Given these considerations we conclude that JH 247 is not a potentially significant site and it is placed in a no-management category.

JH 248:

JH 248 was first reported by Zalesky in 1977 (site form) and was the subject of an update report in 1980. The site is located on the knob of a hill overlooking the confluence of McAllister Creek and the Iowa River (Zalesky, 1977) approximately 1/4 mile east of old Highway 218. Both Zalesky and Miller reported a lithic scatter along the crest of the hill. Miller reports a projectile point reworked into a drill found by another collector.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.53'. The shoreline was eroded at least 20' above the water level. Chert flakes were found near the water level to about 6-18' above. Due to the extreme erosion of JH 248, no further testing or site management is recommended.

JH 259:

Reported by Zalesky in 1977 (site form), JH 259 is situated on a terrace along the eastern shoreline of Hoosier Creek. The site is bounded by two intermittent streams on

the north and the south margins (Zalesky, 1977). Zalesky indicated the area was being rapidly eroded due to lake level fluctuations.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 when the pool elevation was 685.85'. This terrace is partially underwater and the exposed terrace is extremely mucky. No cultural material was found. Due to the periodic erosion and flood deposits on JH 259, no further testing or site management is recommended.

JH 260:

JH 260 was recorded in 1977 (Zalesky, 1977: site form). The site is located on the southern shoreline of the Iowa River bordered by an embankment to the northeast and the old railroad grade to the southwest. Zalesky (1977) reports that artifacts were found eroding from the wave-cut terrace along the entire shoreline.

Great Lakes Archaeological Research Center, Inc. investigated the site in 1986 while the pool elevation was 690.53'. One chert flake was found on the eroded and windblown sandy shoreline. Site context has been lost at JH 260. As a result, no further testing or site management is recommended.

JH 261:

JH 261 was reported by Miller in 1979 (site form). The site is located on the south side of a drainage entering the reservoir from the west along the northeast side of a ridge that trends east from Camp Daybreak. In a localized area, Miller found three chert pieces and one ceramic bodysherd.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.40'. The shoreline is eroded silts a[illegible] no cultural material was

found in the area. The severe erosion and minimal inventory of JH 261 severely limit the research potential of this site. No additional testing or site management is recommended.

JH 263:

Recorded by Miller in 1979 (site form), JH 263 is located on the west side of a ridge formed by the Iowa River to the east and a small unnamed stream to the west. Miller (1979) reported one projectile point fragment, chert debris and grit tempered pottery.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 when the pool elevation was 687.40'. Bedrock is exposed at and above the water level. From the top of the ridge there is a seven foot vertical cut which steeply slopes to the bedrock and water level. No cultural material was found. Due to the extreme erosion at JH 263 the site is believed to have been destroyed. No further testing or site management is recommended.

JH 264:

JH 264 was reported by Miller in 1979 (site form). The site is located on the east side of Coralville Reservoir at the end of a point bar deposit where the Iowa River veers to the east. Numerous flakes and water-rolled pottery sherds were found.

Great Lakes Archaeological Research Center, Inc. investigated the site in 1986 while elevation of the pool was at 689.63'. Three chert waste flakes were found on the shoreline, eroded from water plane fluctuations. Severe erosion has removed contextual data at JH 264. No further testing or site management is recommended.

JH 268:

First reported by Zalesky in 1980 (site form), JH 268 is located on the southern shoreline of the Iowa River, bordered on the east by a ravine and extending to the west along the shoreline for a distance of 25 yards. Cultural material was not reported but erosion of the shoreline was noted.

Great Lakes Archaeological Research Center, Inc. conducted surface collection at the site in 1986. The pool elevation was 685'. The shoreline erosion extended 20-25' above the water level. Chert flakes and a Late Woodland projectile point were found approximately 10-15' above the water level on the eroded surface. JH 268 does not meet the National Register criteria and no further testing or site management is recommended.

JH 270:

JH 270 is located on the shor of a small bay along the northern shoreline of the Iowa River. The site was recorded in January, 1980 by Zalesky (site form) and later updated that same year by Miller (site form). Miller donated a collection to OSA in 1981 which included chert bifaces and waste flakes.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site is located on an eroded shoreline in a small inlet cove 1/4 mile upstream (northeast of 13 JH 123). The erosion extends 15 to 20' above the present water level. The pool elevation at the time of collection was 688.01'. Two chert flakes were found on the eroded shoreline approximately 5' above the waterline (approximately 695'). Because of the poor condition of JH 270, no further testing or site management is recommended.

JH 272:

Known as Sugar Bottom NW, JH 272 was first reported by Miller (1979: site form). The site is located in the Sugar Bottom Recreation Area above the reservoir on top of a ridge which trends southwest, toward the river, and is situated at an elevation of 750'. The site was relocated during surface collecting along an old dirt road which is now used as a nature trail. Subsequent investigations include surface collection by Schermer (1983) and Emerson et al (1984). Emerson also excavated 5 shovel test holes during her investigation.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 and also located cultural material along the trail cut, approximately 1/4 mile from the access road in the Sugar Bottom Recreation Area. The lithic scatter had a linear extent of approximately 100 yards along the interfluve crest. No diagnostic materials were found. Observing the exposed profile in the trail cut, an "A" horizon of 5 to 10cm was noted.

Additional shovel probing was conducted along both sides of the road cut in hopes of recovering diagnostic materials from JH 272. Lithic debris and fire-cracked rock were encountered from the sub-surface tests. However, no datable, formal artifacts were encountered.

Among the activities reflected in the various assemblages at JH 272 are lithic procurement and reduction strategies. This site is one of very few at Coralville Lake that has not had its context radically altered by erosion. The site is considered significant as it can yield more detailed information regarding raw materials selection and processing patterns for local stone materials that are lacking at badly disturbed sites. Further, the activities at JH 272 may be correlated with habitation at near by rockshelters, including Woodpecker Cave. Because of the minimal disturbance, extensive excavation is expected to reveal sub-surface or surface features such as hearths, lithic dumps, and discrete processing stations. To date,

however, investigations at JH 272 have not yielded diagnostic cultural materials. Specific cultural affiliations may be better determined by absolute dating techniques applied to features. The following geomorphic description provides an evaluation of the stratigraphic contexts at JH 272.

Geomorphic Description:

Site JH 272 is located at an elevation of 735' (220.5m) to 740' (222m) A.M.S.L. on a narrow interfluve of a highly dissected upland ridge. The site slopes gently south-southwest toward an unnamed tributary of the Iowa River. The site is on a gently sloping (< 2^{o}) side slope of the interfluve which has a local relief of @ 100' (30m). The site is surrounded by a deciduous forest of oak, hickory, poplar, birch, maple and cedar shrubs. Parent material is loess. A nature trail leads to the site and the area has been minimally disturbed by human activity. There is evidence of heavy equipment tire tracks and the surface layer nearby has been scraped. Small rills and some sheet wash are evidence of recent heavy rainfalls.

The very thin AO horizon was not field tested. It extends 1/8" (.31cm) from the surface and is composed of varied undecomposed matter (leaf litter) typical of a deciduous forest environment. The boundary is gradual to tne A1 horizon.

The A1 horizon extends from 1/8 to 2.5" (.31-6.25cm). Munsell colors are: (a) moist, 10YR 3/2 (very dark grayish brown) and (b) dry, 10YR 5/2 (grayish brown). Texture is silt loam and structure is fine to medium granular. Soil consistence is loose when dry, very friable when moist, and non-sticky and slightly plastic when wet. Soil pH is 8.0 (moderately alkaline). The A1 horizon has a gradual, irregular boundary tc the E horizon which extends from approximately 2.5 to 4.5" (6.25-11.25cm). The E horizon was

not field tested because of the irregular boundary.

The Bt horizon extends from 4.5 to 12" (11.25-30cm), or the extent of the test pit. Munsell colors are: (a) moist, 10YR 4/4 (dark yellowish brown) and (b) dry, 10YR 5/3 (brown). The soil is mottled diffusely, with a density of approximately 1 to 2%: mottles are 10YR 3/2 (very dark grayish brown). Soil texture is silty clay loam and structure is medium sub-angular blocky. When wet, the soil is non-sticky and slightly plastic. When moist, it is very friable and it is loose or noncoherent when dry. Thin, discontinuous silt coatings (10YR 6/3 - pale brown) and thin discontinuous clay skins are evident in this horizon.

Parent material is loess. Taxonomic classification is Typic Hupludalf (fine, silty, mixed mesic) with native vegetation of deciduous forest. Soil is well-drained with moderate permeability. At the time the sample was taken, it was very moist due to recent heavy rainfall. None of the soil horizons effervesce with a 14% hydrochloric acid solution.

JH 273:

Known as Sugar Bottom NW II, JH 273 was reported in 1979 by Miller (site form) and later updated by Miller in April and May of 1980. The site is located just east of a limestone outcrop on a small clay terrace sloping on the northern shore of a major inlet, a few hundred yards west of Woodpecker Cave. Miller's surface collections of JH 273 yielded several projectile points, scrapers, chert flakes and pottery.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. Two pieces of fire-cracked rock and a piece of chert shatter were found on the eroded silt slope southeast of JH 272 and west of JH 202. Pool elevation at the time of collection was 683.10'. Because this site is severely eroded, no further testing or site

management is warranted for JH 273.

JH 274:

Reported by Zalesky in 1980 (site form), JH 274 is situated on a low terrace along the southern shoreline of the backwater at the mouth of Hoosier Creek. An old country road leads to the site and bissects the site (Zalesky, 1980). The cultural material was unreported but the site was already rapidly eroding due to water fluctuations in 1980.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685'. No cultural material was found. The site appears to be underwater but the area above the water table is extremely eroded. Due to the erosion of JH 274, no further testing or site management is recommended.

JH 275:

JH 275 was reported by Zalesky in 1980 (site form). The site is described as a terrace on the southern bank of Hoosier Creek bounded on the west by a low, marshy area on the east situated against the base of an adjacent upland. The cultural material was unreported but erosion of the site noted.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 on two different occasions. During the first visit the pool elevation was 686.62'. The shoreline was a steep erosional cut-bank of approximately 60°. It is apparent this erosion is due to undercutting and calving. There is a slumped tree at the water's edge. Chert flakes and a biface were found on the sands and near the slumped tree.

The second visit came two weeks later and the pool elevation was 697'. The purpose for this visit was to test

the top of the ridge for an extension of the site and geomorphic description. Six shovel tests were placed on top of the ridge near a 3' DBH oak, all were negative. There is also some modern disturbances on the ridge top such as dirt roads. The "A" horizon was inspected for cultural material and geomorphic description. No cultural material was found. It should also be noted that the tree that was slumped on the last visit is now underwater. Due to the extreme erosion of JH 275, no further testing or site management is recommended.

Geomorphic Description:

Site JH 275 is a soil profile extended into a recently eroded north-facing bank of an upland above a terrace along the east bank of Hoosier Creek. The site is located at an elevation of 700 to 702' A.M.S.L. (210-210.6m). Evidence of recent erosion includes the cut bank as well as large trees and sediments slumping into the river. The bank is part of a peninsular-shaped upland that separates Hoosier Creek from Lake MacBride. Local relief is approximately 100' (930m). The soil is well-drained and parent material is sandy loess. Vegetation is a deciduous forest including large oaks, birch, some maple, and numerous shrubs along the bank.

A soil pit was dug as an extension into a recently eroded river bank at site JH 275. The AO horizon extends from 0 to 3/4" (1.8cm). Roots and uncomposed leaf litter typical of deciduous forest vegetation are present.

The A1 horizon extends from 3/4 to 7" (1.8-17.5cm). Munsell colors are: (a) moist, 10YR 4/1 (dark gray) and (b) dry, 10YR 4/2 (dark grayish brown). Texture is sandy loam and structure is fine granular. Soil consistence is soft (weakly coherent, falls apart with slight pressure) when dry, very friable when moist, and slightly sticky and slightly plastic when wet. Soil pH is 8.0 (moderately alkaline). The A1 horizon has a clear smooth boundary to

the E horizon.

The E horizon extends from 7 to 9" (17,5-22.5cm). Munsell colors are: (a) moist, 10YR 4/3 (brown) and (b) dry, 10YR 5/3 (brown). Texture is sandy loam and structure is fine granular. Soil consistence is soft (weakly coherent, falls apart with slight pressure) when dry, very friable when moist, and slightly sticky and slightly plastic when wet. Soil pH is 7.0 (neutral). The E horizon grades discontinuously into the B1 horizon.

The B1 horizon (transition horizon, more B than A) extends from 9 to 13" (22.5-32.5cm). Munsell colors are: (a) moist, 10YR 5/4 (yellowish brown) and (b) dry, 10YR 5/6 (yellowish brown). Soil texture is silt loam and structure is fine to medium granular. When wet the soil in this horizon is slightly sticky and slightly plastic, when moist it is very friable and it is soft when dry (weakly coherent). Soil pH is 6.5 (slightly acid). A gradual smooth boundary is observed between the B1 and B2t horizons.

The B2t horizon from 13 to 25" (32.5-62.5cm). Munsell colors are: (a) moist, 10YR 5/6 (yellowish brown) and (b) dry, 10YR 6/4 (light yellowish brown). Soil texture is loamy and structure is medium to sub-angular blocky. When wet the soil is slightly sticky and slightly plastic, when moist it is very friable and it is soft when dry (weakly coherent). Discontinuous silt coatings are found on ped faces. Soil pH is 6.5 (slightly acid). A gradual smooth boundary occurs between the B2t and B3t horizons.

The B3t horizon (transitional to C) extends from 25 to approximately 40" (62.5-100cm). Munsell colors are: (a) moist, 10YR 6/6 (brownish yellow) and (b) dry, 10YR 7/6 (yellow). Texture is sandy loam and structure is medium to course angular blocky. Soil consistence is soft (weakly coherent, falls apart with slight pressure) when dry, very friable when moist, and slightly sticky and slightly plastic when wet. Soil pH is 5.5. A very striking feature of this soil horizon is the almost continuous and abundant silt

coatings on ped faces with color of 10YR 7/2 (light gray). Soil pH is 5.5 (strong to moderately acid).

The soil pit was very compact and was not dug to the C horizon (assumed sandy loess) at about 40" (100cm). None of the soil horizons effervesce with a 14% hydrochloric acid solution. Taxonomic classification is Typic Hapludalf (coarse-loamy, mixed, mesic) with native vegetation of deciduous forest. Soil is generally well-drained. Recent heavy rainfalls have increased the moisture content in all horizons.

JH 276:

JH 276 was first reported by Zalesky in 1980 (site form). The site is located on the second terrace east of Hoosier Creek bounded on the west by the present county road. The terrace was under cultivation and subject to flooding at the time of reporting. The cultural material was not reported.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 700.41' and the present county road was flooded across Hoosier Creek. The terrace was surface collected in and out of the water. No cultural material was found. The site area is being inundated by water fluctuations and ATV traffic. Due to the extreme inundation and lack of cultural material of JH 276, no further testing or site management is recommended.

JH 277:

Zalesky (1980: site form) reported JH 277 as being situated on a point bar spit on the west side of Coralville Lake at the east end of an unnamed drainage. The site was identified based on a single bone fragment and a clamshell fragment.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.4'. The point bar was underwater and the site was nonrelocatable. The terrace exposed above the water level, however, is marked by severe erosion. Given the landscape conditions and the meagre data from JH 277, the site cannot be expected to yield significant information. JH 277 needs no further management consideration.

JH 281:

JH 281, reported by Zalesky in 1980 (site form), is located on a terrace remnant along an old meander scar, approximately 3/4 mile downstream of the Mid-River Public Use Area. Artifacts were found on the highest elevation of a sandy ridge paralleling the river channel. The nature of the material was not reported, but the area is noted as partially eroding and silting due to changing lake levels.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The meander scar was underwater but trees indicate the locality of the topographic feature on which debris was found. This site can be considered to be either frequently or permanently submerged. Located in a highly eroded locality, JH 281 is not considered to harbor significant research potential. Therefore, the site is placed in a no-management category.

JH 282:

JH 282 was reported by Zalesky in 1980 (site form). The site is located on the west bank of a small south-flowing drainage that enters the Iowa River approximately 1/2 mile upstream from the Menaftey Bridge. The site assemblage consists of chert flakes and nodules, reported to be collected from an eroding shoreline.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. Bedrock was exposed along the entire slope from erosion. Some chert shatter was found on the eroded surface but the materials were non-cultural. No artifacts were found on the site area. Due to the extreme erosion of JH 282 and the lack of cultural debris, no further testing or site management is recommended.

JH 300:

Known as the Sandy Beach River Channel site, JH 300 was first reported by Miller in 1980 (site form). The site is located on the north shore of the main river channel along a slightly elevated terrace, just south of Sandy Beach swimming/boat launch area. The site is almost always submerged. Miller (1980) collected the site when the lake level was 670.22'. Numerous waste flakes, a small projectile point and a few pottery sherds were found.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The site area was underwater. Even according to the legal description, at normal elevation (680') the site is underwater. Due to the high water elevation, JH 300 was not relocated and may never be, under present and future conditions of Coralville Lake. No further management is recommended.

JH 301:

Known as the East Field Campus site, JH 301 was recorded by Miller in April, 1980. Miller provided an update on the site later that same month (site forms). The site is located on a terrace on the east side of the river, between a small inlet to the northwest and a large drainage, 200 to 400 yards to the south. There is an abandoned

farmstead approximately 500 yards to the north. The site yielded eight flakes and two chert blocks in 1980.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. One possible flake was found on the severely eroded surface. Due to the extreme erosion of JH 301, no further testing or site management is recommended.

JH 302:

JH 302 was first reported by Miller in 1980 (site form). The site lies along the southeast bank of an old river channel on a nearby flat terrace at an elevation of approximately 675'. Miller collected the site when the pool elevation was 670.4' and described the area as sandy lake bottom. Materials primarily included small waste flakes.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The site area was underwater and we were unable to relocate the site for evaluation. JH 302 is constantly submerged in a highly eroded context. Its research potential is thus very limited and no further management recommendations are made.

JH 303:

JH 303, reported by Zalesky in 1980 (site form), is located on a small peninsular terrace, about 1/4 mile southeast of JH 43 at an elevation between 680 to 685'. One hundred and eight waste flakes, as well as, two retouched flakes, fire-cracked rock and two grit tempered body sherds were observed on the site.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. Four flakes and one possible piece of shatter was found on the eroded shoreline. Some of the terrace was underwater and also eroded. Due to the extreme erosion of JH 303, no further testing or site management is recommended.

JH 305:

JH 305, first reported by Zalesky in 1980 (site form), is situated on a small ridge on the floodplain. The ridge appears as an island at a pool elevation of 680'. Ten flakes were observed on a badly eroded shoreline at an elevation approximately 680 to 685'.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The ridge (island) was underwater and it was not possible to investigate JH 305. However, given the erosion at this locality, the constant submerged nature of the site, and the meagre artifact assemblage, JH 305 is considered insignificant. No further management activities presented.

JH 306:

JH 306, reported by Zalesky in 1980, is located on a sandy knoll overlooking Hoosier Creek and a small stream to the southwest. When reported, the site was in pasture with the southern edge exposed due to shoreline erosion and trail exposure. Nine flakes were observed on the surface.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. Once, when the pool elevation was 685.85' and the site was relocated, and, a second time to shovel test and record geomorphic data. The elevation of the pool during the second visit was 697'. During the first visit waste flakes and a broken drill tip were found along the exposed sandy slope at the top of the terrace. The terrace appears to have been used as a pasture.

During a second visit the water was approaching the top of the terrace. Eight shovel test holes were placed along

the terrace top (two rows of four holes) and all holes were negative. Material was found along the eroded terrace slope. One of the shovel tests was expanded for soil description. Due to the extreme erosion of JH 306, no furtner testing or site management is recommended. The following geomorphic description is derived from the sub-surface investigations.

Geomorphic Description:

Site JH 306 is located at an elevation of 700' (210m) A.M.S.L. on a river terrace with a surface layer of excessively well-drained sandy sediments. Vegetation includes a sparse covering of low-growing water-tolerant weedy species and a few scrubby vines. The terrace has been recently inundated as evidenced by varied debris. The site lies along the west bank of Hoosier Creek near its entrance to the Coralville Reservoir. The site is at the mouth of an unnamed tributary flowing south-southwest into Hoosier Creek. Local relief is approximately 92' (27.5m) however, the terrace area is flat (0^{o} slope).

A pit was dug to @ 40" (100cm) at site JH 306. Four strata were sampled on this sandy terrace at an elevation of 700' (210m) A.M.S.L. Sediments reflect recent deposition and soil horizons are not yet developed. Buried soils were not encountered.

Stratum 1 extends from 0 to 6" (15cm). The surface layer is covered with weedy species such as plantain and flood debris litters the area. Munsell colors are (a) moist, 10YR 5/3 (brown) and (b) dry, 10YR 7/2 (light gray). Stratum 2 extends from 6 to 10" and Munsell colors are: (a) moist 10YR 3/3 (dark brown) and (b) dry, 10YR 5/4 (yellowish brown). Stratum 3 extends from 10 to 24" (25-60cm). Below 10" (25cm) the sediments become very moist and more compact. Munsell colors are (a) moist, 10YR 7/3 (very pale brown). Stratum 4 extends from 24 to 40". Munsell colors are: (a)

moist, 10YR 5/4 (yellowish brown) and (b) dry, 10YR 7/3 (very pale brown).

Texture of all four strata is sand with a very fine granular structure. Wet consistence is non-sticky and non-plastic. Moist and dry consistence are loose. Clear smooth boundaries occur between strata. The pH of stratum 1 is 7.0 (neutral). Strata 2 through 4 are slightly acid (6.1, 6.1, and 6.2 respectively). None of the strata effervesce with a 14% hydrochloric acid solution. All strata appear well-drained and well sorted in these alluvial sediments.

JH 308:

JH 308, which lies at the end of a dirt road that trends west down a ridge about 1/8 to 1/4 mile from Scales Bend Road was reported by Miller (1980, site form). Twenty-one waste flakes and one utilized flake were found.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 while the pool elevation was at 685.85'. The shoreline was eroded 20 to 25' above the pool elevation. No cultural material was located. Due to the extreme erosion of JH 308, no further testing or site management is recommended.

JH 310:

JH 310 was recorded by Miller in 1980 (site form). The site was located on the east side of a large unnamed inlet on a small spit protruding into the inlet. The lake level was at 677' and the artifacts, which included a hammerstone, a retouched flake and several waste flakes, were found at approximately at 685'.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The shoreline was eroded 15 to 20' above the watertable.

No cultural material was found. According to Miller's description the site may still be underwater. However, due to the extreme erosion of JH 310, no further testing or site management is recommended.

JH 312:

JH 312, reported by Miller in 1980 (site form), is located in a cultivated field west of the old gravel road to Jolly Rogers' boat landing, just north of a small drainage at the edge of the field. Two projectile points, one point tip, and a chert flake were found in an estimated area of five acres.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site area was in grass with a ground visibility of at least 5%. No cultural material was found. A soil pit was dug for the geomorphic description that follows. JH 312 has insufficient research potential to justify further investigation.

Geomorphic Description:

Site JH 312 is located at an elevation of 730' (219m) A.M.S.L. on a convex side slope (< 2^{o}%) of a 1/2 mile wide, peninsular-shaped, highly dissected upland ridge. Local relief of the peninsular ridge is 118' (35.4m). The site slopes north-northwest toward a meander bend of the Iowa River which sweeps the peninsula. The soil pit is located in the center of an interfluve with tributaries to the east (@ 850-1000', 255-300m) and west (400', 120m). The pit was dug in a cultivated field covered (this season) with grass. Very small undulations (< 0.5^{o} slope) occur around the site and appear to have been created by plowing. Parent material is loess.

The AP horizon extends from the surface to 7" (17.5cm). Strong evidence of a plow zone exists at this site. The

field is now planted with grass and corn kernels were found in the soil pit at 5.5" (14cm) from the surface. Munsell colors are: (a) moist, 10YR 3/3 (dark brown) and (b) dry, 10YR 5/3 (brown). Texture is silt loam and the structure is fine granular. Soil consistence is soft (weakly coherent, falls apart with slight pressure) when dry, very friable when moist, and slightly sticky and slightly plastic when wet. Soil pH is 6.2 (slightly acid). The AP horizon has a smooth, abrupt boundary to the B1 horizon.

The B1 horizon (transition horizon, more B than A) extends from 7 to 10" (17.5-25cm). Munsell colors are: (a) moist, 10YR 3/3 (dark brown) and (b) dry, 10YR 5/3 (brown). Soil texture is silty clay loam and structure is fine, sub-angular blocky. When wet the soil in this horizon is slightly sticky and slightly plastic, when moist it is very friable, and it is soft when dry (weakly coherent). Very few thin, discontinuous silt coatings (10YR 7/1, light gray) are evident on ped faces. Soil pH is 6.2 (slightly acid). A gradual, smooth boundary occurs between the B1 and B2t horizon.

The B2t horizon extends from 10 to 14" (25-35cm). Munsell colors are: (a) moist, 10YR 4/4 (dark yellowish brown) and (b) dry, 10YR 5/3 (brown). Soil texture is silty clay loam and structure is fine, sub-angular blocky. When wet, the soil is slightly sticky and slightly plastic, when moist it is very friable, and when dry it is soft (weakly coherent). Thin, discontinuous silt coatings are found on ped faces, but with greater continuity than in the B1 horizon. A few iron oxides are also present (5YR, 6/8, reddish yellow). Soil pH is 6.2 (slightly acid). A gradual, smooth boundary occurs between the B2t and B22t horizons. Many worm channels were observed in this horizon.

The B22t horizon has an increase in silt coatings on ped faces as well as iron oxide coatings (5YR 6/8). This horizon extends from 14" (35cm) to an indefinite depth. The pit was not dug further due to the compactness of the soil.

Munsell colors are: (a) moist, 10YR 5/4 (yellowish brown) and (b) dry, 10YR 5/6 (yellowish brown). Soil texture is silty clay loam and structure is medium, sub-angular blocky. When moist, the soil is firm. The dry soil is slightly hard. When wet, the soil is slightly sticky and plastic. Soil pH is 5.3 (strongly acid).

None of the soil horizons effervesce with a 14% hydrochloric acid solution. Parent material is loess. Taxonomic classification if Typic Hapludalf (fine, silty, mixed mesic), with native vegetation of deciduous forest. Soil is generally well-drained with moderate permeability although recent heavy rainfalls have increased its moisture content.

JH 313:

JH 313 was first reported by Miller in 1980. The site is located north of JH 312 in a cultivated field. A projectile point tip, an end scraper fragment, and another scraper were found in an undetermined area. One of the scrapers was found on the highest elevation of the field.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The field was cultivated in corn. The field was surface collected and no cultural material were found. As a result, JH 313 is not considered to have significant research potential. No further investigations are warranted.

JH 314:

JH 314, reported by Miller in 1980, lies near the top of the ridge south of the University Field Campus archery range. Artifacts found there include waste flakes and chert blocks. The materials were collected in a cultivated field, adjacent to the archery parking area across the fence and slightly west of the top of the ridge. The estimated size of the site was 1/4 acre.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The area described by Miller is outside of the ACOE Boundary. JH 314 should be removed from the Coralville Management Plan.

JH 315:

JH 315 was recorded by Miller in 1980 (site form). The site lies in a cultivated, westward sloping field situated above the ravine on the ridge top, east of the Iowa River and west of Scales Bend Road. Waste flakes and a grey chert lanceolate point were found in a three to four acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site area was presently in grass with at least 5% ground visibility. The interfluve was surface collected and no cultural material was found. No further management recommendations are made regarding JH 315.

JH 316:

JH 316 is located in a cultivated field just south of the old road into the Boy Scout Camp at the head of the drainage. The site was recorded by Miller in 1980 (site form). A ravine is south of the site extending east/west. Two point fragments and two chert flakes were found in a one acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site area is grassy with at least 5% visibility. This interfluve was surface collected and no cultural material was found. Because surface soils have been stripped by agricultural practices and due to the fact that surface collection yielded no additional artifacts, Jh 316 is concluded to be of low research potential.

JH 317:

JH 317, reported by Miller in 1980 (site form), is located in a small cultivated field west of Scales Bend Road immediately east of a housing area. The site is south of JH 316 and north of JH 315. Waste flakes and a scraper/drill were found in an estimated area of 2 to 4 acres.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The cultivated field is now in grass with a ground visibility of at least 5%. The field was surface collected and a soil pit was dug and described. No cultural material was found at this low research potential site. It needs no further consideration. The following is based on sub-surface investigation at JH 316.

Geomorphic Description:

Site JH 317 is located at an elevation of 750' (225m) A.M.S.L. on a convex side slope (gently sloping, < 2°) of a 1/2 mile wide peninsular-shaped, highly dissected upland ridge. Local relief of the peninsular ridge is 118' (35.5m). The site slopes west toward a meander bend of the Iowa River which sweeps the peninsula. The soil pit is located in the center of an interfluve with tributaries to the northwest 1000' (300m) and west 150' (45m). The pit was dug in a cultivated field planted recently in grass. Very small undulations (< 0.5° slope) occur around the site and appear to have been created by plowing. Parent material is loess.

The AP horizon extends from the surface to 3.0" (7.5cm). The field is now grass covered and the roots extend into this horizon. Munsell colors are: (a) moist, 10 YR 4/2 (dark grayish brown) and (b) dry, 10YR 5/3 (brown). Texture is silt loam and the structure is fine granular. Soil consistence is soft (weakly coherent, falls apart with slight pressure) when dry, very friable when

moist, and slightly sticky and slightly plastic when wet. Soil pH is 7.0 (neutral). The AP horizon has a gradual, smooth boundary to the E horizon beneath it.

The E horizon extends from 3 to 5" (7.5-12.5cm). Munsell colors are: (a) moist, 10YR 3/3 (dark brown) and (b) dry, 10YR 6/3 (pale brown). Texture is silt loam and the structure is fine granular. Soil consistence is soft (weakly coherent, falls apart with slight pressure) when dry, very friable when moist and slightly sticky and slightly plastic when wet. Soil pH is 6.0 (medium acid). The E horizon has a gradual, smooth boundary to the B 1 horizon.

The B1 horizon (transition horizon, more B than A) extends from 5 to 15" (12.5-37.5cm). Munsell colors are (a) moist, 10YR 5/4 (yellowish brown) and (b) dry, 10YR 5/6 (yellowish brown). Soil texture is silty clay loam and structure is fine to medium, sub-angular blocky. When wet the soil in this horizon is slightly sticky and slightly plastic, when moist it is very friable and when dry, weakly conerent. Very few thin, discontinuous silt coatings (10YR 7/1, light gray) are evident on ped faces. Soil pH is 6.0 (medium acid). A gradual smooth boundary occurs between the B1 and B2t horizons. Mottles are diffuse, with density less than 3%. Color of mottles is 10YR 6/2 (light brownish gray).

The B2t horizon extends from 21" (52.5cm) to an indefinite depth. The pit was not extended because of the compactness of the soil. Munsell colors are: (a) moist, 10YR 5/4 (yellowish brown) and (b) dry, 10YR 5/6 (yellowish brown). Soil texture is silty clay loam and structure is medium sub-angular blocky. When moist the soil is firm. Dry soil is slightly hard. When wet, the soil is slightly sticky and plastic. Soil pH is 5.0 (very strong acid).

None of the soil horizons effervesce with a 14% hydrochloric acid solution. Parent material is loess. Taxonomic classification is Typic Hapludalf (fine, silty,

mixed mesic) with native vegetation of deciduous forest. Soil is generally well-drained with moderate permeability although recent heavy rainfalls have increased the moisture content.

JH 318:

JH 318 was first reported by Miller in 1980 (site form). The site is located on the north side of a west flowing drainage across the reservoir from the Crosheck farm. The collection, including seven waste flakes and a possible biface, was found along the eroded shore in a one acre area at an elevation between 682 and 692'. The lake level was 681' at the time of collection.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The shoreline was severely eroded approximately 20' above the watertable. No cultural material was found on the surface. According to Miller's description the site should not be entirely underwater. Due to the extreme erosion of JH 318, no further testing or site management is recommended.

JH 320:

JH 320, reported by Miller in 1980 (site form), is located across the inlet from JH 321 on an interfluve bounded on the south by a minor inlet and on the north by a major inlet. The topsoil was reported as eroding into the lake at the edges. One point base, one point tip, flakes and several pottery sherds were found in a 1/2 acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. Extreme erosion of the shoreline was approximately 20' above the water level. Due to the extreme erosion of JH 320, no further testing or site management is recommended.

JH 321:

JH 321 was recorded in 1980 by Miller (site form). The site is located on the south side of a west flowing drainage across from JH 320. Waste flakes and pottery sherds were found in a 1/2 acre area on an eroded shoreline.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. Severe erosion extends 20' above the lake level. Trees on this shoreline are undercut. No cultural material was found. Due to the extreme erosion of JH 321, no further testing or site management is recommended.

JH 322:

Known as the Manaffey Farm Site, JH 322 was first reported by Miller in 1980 (site form). The site is located on the west side of a major bend in the paved entrance to Sugar Bottom Park on a ridge-top at the northwest entrance. The site was updated by Tiffany in 1981 with information from the Charles Keyes manuscripts (site form). Artifacts were found at eroded spots near the junction of an old dirt road and Sugar Bottom Road. Material included a side-notched projectile point, twenty-three flakes, some of which were retouched. Site size was estimated to be 1/4 acre.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The area has grass patches and becoming leaf littered. Two rows of four shovel test holes, placed 10m apart and surface collection yielded negative results. No further investigations are warranted at JH 322.

JH 323:

JH 323, reported by Miller in 1980 (site form), is located on the western shoreline of the reservoir just north

of a small, inlet directly opposite the northern end of Sugar Bottom Park. Numerous chert flakes and several cores were found above a limestone stratum on a clay terrace that forms a projection along the shoreline. The elevation of the materials was 688 to 693'.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The shoreline erosion was 20' above the water with bedrock exposures. No cultural material was found. Due to the extreme erosion of JH 323, no further testing or site management is recommended.

JH 324:

JH 324 was first reported by Miller in 1980 (site form). The site is located on the western shoreline of the reservoir, opposite Sugar Bottoms Public Use Area, on a terrace above, and southwest of a limestone stratum just north of a small inlet. Waste flakes and a crude scraper or biface were found on the eroded shoreline in a 1/2 acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The shoreline was extremely eroded at least 20' above the lake level. Bedrock is exposed along the lower slope. No cultural material was located. Due to the extreme erosion of JH 324, no further testing or site management is recommended.

JH 325:

JH 325, reported by Miller in 1980 (site form), is located adjacent to the University of Iowa Field Archery Range in a cultivated field. The land slopes to the north and the site is situated just off the ridge top above a wooded ravine. Waste flakes and several chert blocks were found in the cultivated field in an area about 1/8 acre.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site area is outside of the ACOE Boundary and should be removed from the Coralville Management Plan.

JH 326:

JH 326 was first reported by Miller in 1980 (site form). The site is located on a ridgetop just east of Coralville Lake at an elevation of nearly 800'. The cultivated ridge slopes toward the lake. A large ravine lies to the south where the pavement nears the Mahaffey Bridge. Several waste flakes, a couple of possible scrapers, and a Durst Stemmed point were found in a 1/4 acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The area is outside of the ACOE Boundary and should be removed from the Coralville Management Plan.

JH 327:

JH 327 is located on a north terrace of a drainage which empties into Coralville Lake. The site was recorded by Miller in 1980. The site was collected when the lake level was 672' and the materials, which included waste flakes, were found at 680 to 685'. The site was described as eroded by lake level fluctuations.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The site was submerged, however, the present shoreline is eroded 20' about the watertable. We thus assume the context at JH 327 to have been destroyed. No further investigations are recommended.

JH 328:

JH 328, reported by Miller in 1980 (site form), is located within a large major inlet along the north shore on a gently sloping terrace. Waste flakes were found on the eroded shoreline in a 1/2 acre area at an elevation of 685 to 690'.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 when the pool elevation was 689.69'. The shoreline was eroded 20' above the lake level. No cultural material was found. Due to the extreme erosion of JH 328, no further testing or site management is recommended.

JH 329:

JH 329, reported by Miller in 1980, occupies a long, narrow land spit extending to a narrow ridge to the southeast. The spit separates a major inlet on the east side of the reservoir. Fifteen waste flakes were found in a 1/2 acre area on a severely eroded shoreline.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. A few waste flakes were found on the eroded surface. The entire spit is eroded to underlying silts and bedrock. Due to the extreme erosion of JH 329, no further testing or site management is recommended.

JH 300:

JH 300 was first reported by Miller in 1980. The site is located on the southern shoreline of Turkey Creek at the outlet to Coralville Lake. It is on the southern border of an old road cut on the western terrace below a prominent ridge which trends from the northwest. The site is identified as a "mano with pecking and possible metate" in a 1/8 acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The erosion was severe but the site location was underwater. No cultural material was found on the eroded shoreline. JH 300 is not considered to possess sufficient research potential to justify further investigation.

JH 331:

JH 331 was recorded in 1980 by Miller (site form). The site was reported as "two possible mounds," one conical and one linear remnant.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 and located the possible mounds 500' east from the ACOE boundary corner. The linear mound was sectioned near the west end and the profile described. No cultural material was found in association with the "mounds". This site is outside of Corps land holdings. Soil coring of the mound was not conclusive, however, as noted in the following description, it does not appear to be a man-made feature.

Geomorphic Description:

Site JH 331 is located at an elevation of 760' (228m) A.M.S.L. on top of a narrow (@ 400' (120m) wide, 1000' (300m) long) bedrock controlled promontory ridge. Directly north is a meander loop of the narrow bedrock gorge of the Iowa River. An unnamed tributary, located 400' (120m) south of the site, flows north-northeast into the Iowa River. A smaller tributary flows into the Iowa River about 1800' (555m) west of the site. Local relief of the promontory ridge is 70' (21m).

The sampled site is on a ridge [illegible] steep (about 20-25°) slopes to the [illegible] site is on the summit of the north [illegible] dug in a small knoll elongated in the [illegible] promontory ridge. A foot path [illegible] long axis of the knoll, [illegible]

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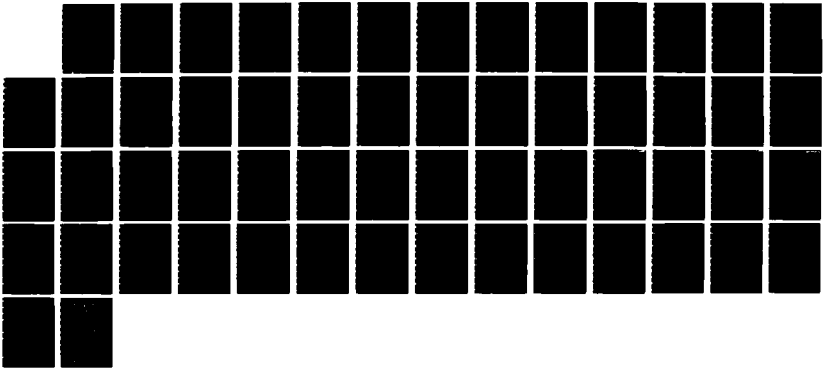

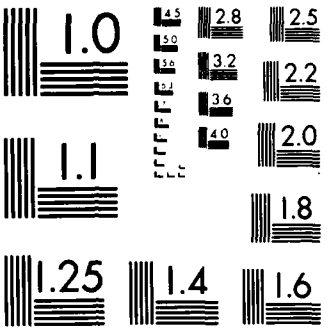

mound-shaped form. Vegetation is deciduous forest of oak, birch, and cedar shrubs. Parent material is loess.

The AO horizon, a 1/4 veneer of undecomposed matter (primarily leaf litter), was not field tested. The boundary is gradual and wavy to the A1 horizon.

The A1 horizon extends from 1/4 to 6" (.625-15cm). Munsell colors are: (a) moist, 10YR 4/2 (dark grayish brown) and (b) dry, 10YR 5/2 (grayish brown). Texture is silt loam and structure is fine granular. Soil consistence is soft (weakly coherent, falling apart with slight pressure) when dry, very friable when moist, and slightly sticky and plastic when wet. Soil pH is 7.0 (neutral).

The A1 horizon has a gradual wavy boundary to the E horizon which extends from 6 to 8.5" (15-21cm). Munsell colors of the E horizon are: (a) moist, 10YR 3/3 (dark brown), and (b) dry, 10YR 5/4 (yellowish brown). Texture is silty clay loam and structure is fine to medium sub-angular blocky. Soil consistence is soft (weakly coherent, falling apart with slight pressure) when dry, very friable when moist, and slightly sticky and plastic when wet. Soil pH is 6.8 (neutral).

The B horizon extends from 8.5 to 12" (21-30cm), the extent of the test pit. Cutans were not observed. Munsell colors are: (a) moist, 10YR 5/6 (yellowish brown) and (b) dry, 10YR 6/4 (light yellowish brown). Soil texture is silty clay loam and structure is medium sub-angular blocky. When wet the soil is slightly sticky and slightly plastic; when moist is is very friable, and when dry it is very soft (weakly coherent and falling apart with slight pressure). Soil pH is 6.7 (neutral).

None of the soil horizons effervesce with a 14% hydrochloric acid solution. Parent material is loess. Taxonomic classification is a Typic Hapludalf (fine, silty, mixed mesic) with native vegetation of deciduous forest. Soil is well-drained with moderate permeability. The soil profile is not indicative of a man-made feature.

JH 333:

JH 333, reported by Miller in 1980 (site form), is located at the base of a hill on the east side of a major inlet. A major drainage comes in from the west and a minor drainage from the southeast. The site occupies a small spot (approximately 1/5 acre) along the east bank of the small drainage where the lake has eroded the terrace. Many flakes and a weathered pottery sherd were found here.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.65'. The shoreline was extremely eroded with bedrock exposure along the slope. A few flakes and shatter were found. Due to the extreme erosion of JH 333, no further testing or site management is recommended.

JH 338:

JH 388 was first reported by Miller in 1980 (site form). The site is located on the rolling hilltop area lying between two major drainages at an elevation of 760-790' on cultivated ground. The ACOE boundary is north of the site. Eighteen waste flakes were surface collected in a 4-6 acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The area was cultivated and planted in corn. Fifteen pieces of fire-cracked rock, one heat-treated flake and one Middle Woodland lanceolate knife were found scattered throughout the field on an extremely eroded ridge top and slope due to agricultural practices. Because of the extreme erosion of JH 338, no further testing or site management is recommended.

JH 339:

JH 339, recorded by Miller in 1980 (site form), is located along the north border of a small wooded east-west

drainage leading into a major drainage. It is on sloping, cultivated land facing south. A chert block, a retouched flake, and a small, crude scraper were found in a 1-2 acre area.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 690.53'. Chert waste flakes were found on the north shoreline of the first drainage, northwest of JH 248. The shoreline is extremely eroded at least 20' above the water level. Due to the extreme erosion of JH 339, no further testing or site management is recommended.

JH 340:

JH 340 was first reported by Miller in 1980 (site form). The site is located on the east side of a drainage that flows south into the reservoir. A housing development is located to the east of the site. Waste flakes, a possible core, a retouched flake and a side-notched point were found in a 1/8 acre area on a severely eroded slope.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The shoreline was eroded some 20' above the lake level. One flake was found on the surface. Due to the extreme erosion of JH 340, and the limited assemblage, no further testing or site management is recommended.

JH 354:

JH 354, reported by Miller in 1981 (site form), and later updated (GLARC, Inc., 1984: site form) is located 200 yards north of the county road at the foot of a hill east of Plum Creek near the edge of the cultivated area at an elevation of 700 to 710'. Approximately sixty flakes and five biface fragments were found in the combined surface collections.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site area was cultivated in soybean and corn. Several flakes were found on the surface during surface collection. A soil pit was dug and the bottom was bucket augered to determine the presence of buried surfaces. The following description is derived from sub-surface investigation.

Geomorphic Description:

Site JH 354 is located in the Hawkeye Wildlife Area on an alluvial fan at the base of Plum Creek, a tributary flowing south into Coralville Lake (the Iowa River). Elevation is at 705' (211.5m) A.M.S.L. It is within a larger area containing a complex suite of landforms including river terraces, colluvial footslopes, and coalescing alluvial fans. Vegetation includes low-growing, water-tolerant weedy species. A soybean field is located about 10' east of the site, grading eastward (upslope) into corn, and eventually into deciduous forest on the hillslope to the east. The area appears to have been recently inundated when reservoir level reached 706' (211.8m). Local relief of the area is as great as 150' (45m), including the upland region to the north. The immediate area is gently sloping (@ 2-3°).

The following descriptions represent a probable combination of alluvial sediments, soil horizons, alluvial fan components and possibly terrace sediments. The strata vary in thickness and represent a complexity of processes including recent inundation and deposition of alluvium by several flood episodes. Specific interpretation requires more information on time and spatial characteristics of inundation as well as specific sediment load and observation of sedimentation rates. Several of the strata appear to be affected by local water table fluctuations induced by wet-dry local climatic regimes.

Coring to find a paleosol under the alluvial fan material was unsuccessful. Operations were discontinued when materials encountered were representative of the intermediate terrace upon which a previously identified paleosol was developed and the alluvial fan subsequently deposited.

Stratum 1 extends from 0 to 7" (17.5cm). It appears to have been recently plowed, however, no crops have been planted this season. Munsell colors are: (a) moist, 10YR 3/1 (very dark gray) and (b) dry, 10YR 5/2 (grayish brown). Texture is silt and structure is fine granular. When wet, consistence is non-sticky and non-plastic, when moist and dry it is loose (noncoherent). Soil pH is 6.7 (neutral) and a clear smooth boundary exists between this strata and stratum 2.

Stratum 2 is distinguished by dispersal of iron oxides (5YR 5/8). It extends from 7 to 11" (27.5cm). Munsell colors are: (a) moist, 10YR 4/2 (dark grayish brown) and (b) dry, 10YR 5/2 (grayish brown). Texture is silt and structure is fine granular. When wet, consistence is non-sticky and non-plastic, when moist and dry it is loose (noncoherent). Soil pH is 6.5 (almost neutral) and a clear smooth boundary exits between this stratum and stratum 3.

Stratum 3 also contains iron oxides (5YR 5/8), but also has silt coatings 10YR 7/1 (light gray) on ped faces. This layer extends from 11 to 33" (27.5-82.5cm). Munsell colors are: (a) moist, 10YR 4/3 (brown and (b) dry, 10YR 5/2 (grayish brown). Texture is silt and structure is fine, sub-angular blocky. When wet, consistence is non-sticky and non-plastic, when moist and dry it is loose (noncoherent). Soil pH is 5.7 (medium acid) and a clear smooth boundary exists between stratum 3 and stratum 4.

Stratum 4 is absent of iron oxides and silt coatings. It extends from 33 to 43" (82.5-107.5cm). Munsell colors are: (a) moist, 10YR 3/1 (very dark gray) and (b) dry, 10YR 5/3 (brown). Texture is silt and structure is fine sub-angular blocky. Soil pH is 5.5 (strong to medium acid).

When wet, the sediments are non sticky and non plastic; when dry, they are loose and noncoherent. The subsequent strata are identified from samples collected with the bucket auger plus extensions.

Stratum 5 is very mottled and contains more iron oxides than stratum 4. It extends from 43 to 51" (107.5-127.5cm). It is silty loam with a fine sub-angular blocky structure. Munsell colors are: (a) moist, 10YR 4/4 (dark yellowish brown) and (b) dry, 10YR 5/4 (yellowish brown). Dark manganese concretions (10YR 2.5/1) occur as well as iron concretions (7.5YR 6/8). Grayish 7.5YR 6/2 mottled areas also occur. Soil pH is 6.7 (medium acid).

Stratum 6 shares color characteristics with stratum 4. The three variations (gray, red, black) are more evenly distributed, being almost of equal amounts. This stratum is silty clay loam with a medium sub-angular blocky structure. When wet, the sediments are slightly sticky and slightly plastic. When moist, they are friable and when dry, slightly hard. This layer extends from 51 to 64" (127.5-160cm). The water table was encountered at 64" (160cm). Soil pH is 6.5 (neutral).

Stratum 7 is clay loam with a medium sub-angular blocky structure. It extends from 64 to 83" (160-207.5cm). It is sparsely mottled (10YR 7/2, light gray) and contains a light, uneven dispersal of iron oxides 2.5YR 4/8 (red). When wet, consistence is sticky and plastic, when dry it is hard and when moist it is firm. Soil pH is 6.5 (neutral).

Stratum 8 is a very gleyed (over 50%) sandy clay loam with a medium sub-angular blocky structure. The bucket auger sample was collected at a depth of 83" (207.5cm). Munsell colors are: (a) moist, 10YR 5/4 (yellowish brown) and (b) dry, 10YR 6/3 (pale brown). The gleyed portion is 10YR 7/2 (light gray). Iron oxides (2.5YR 4/8) are also present. Soil pH is 6.5 (neutral). Consistence is slightly sticky and slightly plastic when wet; when moist it is very friable and when dry is is slightly hard.

Strata 9 through 12 are of sandy texture and represent a distinct transition. All strata share the following characteristics: pH 6.5 (neutral), texture is sand and structure is fine granular. Consistence is loose when dry and moist and non-sticky and non-plastic when wet. Munsell colors are as follows:

Stratum 9: 95" (2.4m) moist, 10YR 5/6 (yellowish brown); dry, 10YR 6/4 (light yellowish brown).

Stratum 10: 12' (3.6m) moist, 10YR 5/6 (yellowish brown); dry, 10YR 6/3 (pale brown).

Stratum 11: 13' (3.9m) moist, 10YR 3/3 (dark brown); dry, 10YR 5/2 (grayish brown). Concretions are 2.5YR 2.5/0 (dark black).

Stratum 12: 14' (4.2m) moist, 10YR 6/3 (pale brown); dry, 10YR 8/4 (very pale brown).

A "pebble band" was encountered in Stratum 11 in a matrix of poorly sorted sands. Some "pebbles" are actually cemented sand grains, or possible "loess Kindchen". Pebbles are sub-round to angular, 1/2 to 2/3" (1.25-1.66cm) in diameter. Based on both the surface and subsurface investigations, the archaeological potential of JH 354 appears minimal. No further management is recommended.

JH 355:

JH 355 was first reported by Miller in 1981 (site form). The site is located west of Plum Creek just north of the county road. Approximately twenty-five waste flakes were collected along the north-south fence.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site area is outside of the ACOE boundary. Therefore, JH 355 should be removed from the Coralville Management Plan.

JH 362:

JH 362, reported by Schermer in 1981 (site form), is located on the south bank of a large east flowing drainage

just east of a small secondary drainage. A Norton point, Steuben point and three waste flakes were found on a strip of shoreline exposed due to wave erosion.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The shoreline was severely eroded at least 20' above the water with bedrock exposed at the water line. No cultural material was found. Due to the extreme erosion of JH 362, no further testing or site management is recommended.

JH 364:

JH 364 was first reported by Schermer in 1981 (site form). It is described as a historic farmstead located along the north shore of an inlet just north of the Mahaffey Bridge on the west side of the reservoir. Materials were defined as historic debris and two five cent pieces ca. 1883-1913.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. The site area consists of a homestead. Poured concrete foundations and a well foundation which has Sept. 16, 1947 scribed in it were noted. Also an automobile with "commercial 51", Ball jars and crockery fragments were found on the surface. The land surface is subject to both erosion from water level fluctuations and siltation from flooding. When the pool elevation exceeds 690' the site area is underwater. JH 364 is not considered to be a significant research resource and no further investigations are warranted.

JH 365:

JH 365, recorded by Schermer, (1981, site form), is located on a terrace on the southeast side of an inlet, slightly west of Sugar Bottom Public Use Area. The

shoreline was being eroded and undercut at the time of collection when three chert waste flakes were recovered.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. The shoreline was eroded to a distance of 15-20' above the water level. No cultural material was found in the site area. Due to the extreme erosion of JH 365, no further testing or site management is recommended.

JH 366:

JH 366 was first reported by Schermer in 1981 (site form). The site is located on an interfluve running east and west down to the mouth of a large inlet. One point base and three flakes were found on an eroding surface.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. Extreme erosion exposed silts, clays, and bedrock about 10' above the water table. One projectile point, one large flake scraper/knife and a flake were collected. Due to the extreme erosion of JH 366, no further testing or site management is recommended.

JH 367:

JH 367 was recorded by Schermer in 1981 and a site form later updated by Miller in 1983 (site forms). The site was located on the point at the mouth of the inlet on the west bank of the Coralville reservoir. The site is at the toe of the ridge on which JH 366 is situated. Thirty-nine flakes, a drill base, a point fragment and two weathered sherds were found on a severely eroded surface.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. A scatter of flakes were found on a severely eroded surface 10' above the lake shore. Due to the extreme erosion of JH 367, no further testing or site management is recommended.

JH 368:

JH 368, reported by Schermer in 1981 (site form), is located on the east shore of Coralville Lake on the southwest corner of the field campus. Three waste flakes were found.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. No cultural material was found on the eroded surface. The site may be underwater according to Schermer's description. However, erosion is so severe at this locality that no further investigations are recommended.

JH 369:

JH 369 was first reported by Schermer in 1981 (site form). The site is located on a very steep bank 600-700' north of the inlet on the south side. Flakes and a chert cobble were found on an undercut bank.

Great Lakes Archaeological Research C nter, Inc. revisited the site in 1986. The pool elevation was 689.89'. No cultural material was found. The site may have caved off and eroded into the reservoir. The site area may be underwater. No further work at JH 369 are justified.

JH 370:

JH 370, recorded by Schermer (1981, site form) is located in an east-west inlet on the north shoreline. Seven flakes, fifteen grit-tempered body sherds and a possible gorget fragment were found on the eroded shoreline.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'. No cultural material was found on the eroded shore. The shore was eroded approximately 20' above the water. Due to the extreme erosion of JH 370, no further testing or site management is recommended.

JH 371:

JH 371 was first reported by Schermer in 1981 (site form). The site is located on the south terrace of Hoosier Creek, bordered by drainages to the east and west. Grit-tempered pottery sherds were found eroding out of the bank.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. Several chert flakes and modern historic debris were found on the severely eroded shoreline. Due to the extreme erosion of JH 371, no further testing or site management is recommended.

JH 372:

JH 372 was first reported by Schermer in 1981 (site form). The site is located near the confluence of Hoosier Creek and the Iowa River. The site is on the east side of a small inlet across from JH 371 and part of the site may have been destroyed by dredging from a boat landing. Nineteen flakes and a Norton point was found on the eroded terrace.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The terrace was extremely eroded and one chert flake was found. Due to the condition of JH 372, no further testing or site management is recommended.

JH 374:

JH 374, reported by Schermer (1981, site form) is located on a high terrace scarp in a horse pasture. One projectile point was found in an eroded gully. The terrace is bordered by drainages to the east and west, approximately 3/4 mile upstream from the Coralville Dam.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 689.69'.

Cultural remnants of a late 19th century homestead which include black glass, Queen Anne ware and many cut nails. One chert flake was also found. The shoreline is under extreme erosion. Due to the erosion of JH 374, no further testing or site management is recommended.

JH 375:

JH 375 was first reported by Schermer in 1981 (site form). The site is located on a trail cut on the ridge above and southeast of JH 369. One point fragment was found on the surface in the trail cut.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The trail cut was becoming vegetated. Nothing was found along the trail cut to relocate the specific site area. The ridge was becoming eroded from pool elevations. The pool elevation was 689' and erosion occurred at least 20' above the water. No further investigations are recommended.

JH 376:

JH 376, reported by Schermer (1981, site form) is located on the western shore of a north-south inlet one mile west of the Mahaffey Bridge. One flake was found on the eroded shoreline.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.4'. Erosion occurred 20' above the water table. No cultural material was found. Due to the extreme erosion of JH 376 and the lack of artifacts recovered, no further testing or site management is recommended.

JH 377:

JH 377 was first reported by Schermer in 1981 (site form). The site is located on a terrace on the north shore

of an inlet across the reservoir from the Lake MacBride Dam. Two flakes and four pottery sherds were found on an eroding surface.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. This year the site was covered with sparse and scattered vegetation. The terrace was subject to both erosion from water level fluctuations and siltation from flooding. The shoreline had a straight cut bank of 6 to 7' above the water table. No cultural material was found. Due to the extreme erosion of JH 377, no further testing or site management is recommended.

JH 378:

Jh 378 was first reported by Schermer in 1981 (site form). This site is located on the north side of a small drainage south of the Twin View Heights subdivision. Nine flakes were found on a severely eroded surface.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The bank cut extended 20 to 30' and no cultural material was found. Due to the extreme erosion of JH 378, no further testing or site management is recommended.

JH 379

JH 379, reported by Schermer (1981, site form) is located on a terrace on the west shore of the Coralville reservoir approximately 1/4 mile south of the Jolly Roger boat landing below an under-cut terrace. Four flakes and grit-tempered pottery was found on the eroded surface.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 several times under different pool elevations. The lowest pool elevation was 687.40'. At an elevation of 690.17' much modern historic debris was

found on the eroded shoreline and one possible piece of fire-cracked rock was observed. Due to the eroded shoreline of JH 379, no further testing or site management is recommended.

JH 380:

JH 380 was first reported by Spriestersbach in 1981 (site form). The site is located on the east shore of the reservoir, east of Twin View Heights, bordered by two small drainages. The site was identified by the presence of one cord-marked grit-tempered sherd.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The bank but was 20 to 30' above the water level. No cultural material was located. Due to the extreme erosion of JH 380, no further testing or site management is recommended.

JH 384:

JH 384, reported by Miller (1981, site form), lies along the original north river bank south of Sandy Beach Public Use Area. The lake level was at 670.3' and four flakes, a crude biface and a chopper were collected at 672' on the exposed bank.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The site was still underwater. JH 384 is habitually inundated and no further investigations are warranted.

JH 386:

JH 386 was first reported by Miller in 1981 (site form). The site is located on a small sloping terrace south of a drainage and inlet of Coralville Lake. Limestone

outcropping lies immediately south and adjacent to the site. An access road to a housing development lies on top of the ridge about 1/4 mile west of the site. Six waste flakes, a small core, a long white chert biface, and a bodysherd were collected at an elevation of 675 to 678'.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The site was underwater and, infact, can be considered permanently submerged. No further investigation or management is recommended.

JH 389:

JH 389, identified Schermer (1981, site form) is located on the west side of the reservoir, north of a drainage that flows northwest to southeast. Four chert waste flakes, a projectile point tip, and a biface were found on a strip of glacial till and soil above a steep rocky shore.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. One small chert flake was found on the eroded shore above a steep limestone ledge. Due to the extreme erosion of JH 389, no further testing or site management is recommended.

JH 390:

First reported by Spiesterbach in 1981 (site form) JH 390 is located on a sloping terrace west of Sandy Beach Public Use Area. The terrace is in a large drainage the mouth of which is generally submerged. Twenty-two chert flakes, one point tip, and one biface were recovered here.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The site area was submerged. The exposed, eroded area adjacent to the site was collected, but no cultural material

was found. No further investigations at JH 390 are recommended.

JH 392:

JH 392 was first reported by Schermer in 1981 (site form). The site is located on the southern shore of the reservoir, north and west of the Mahaffey Bridge, approximately 800' northwest of JH 33. The site was defined by the presence of historic material on the surface, however, no collection was apparently made in 1981.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. There was no cultural material, historic or prehistoric, on the eroded terrace. Due to the severe erosion and the lack of cultural materials in association with JH 392, no further testing or site management is recommended.

JH 393:

Schermer reported JH 393 in 1981 (site form). The site is located on the east bank of a large north-south inlet near its mouth, south of JH 367. Flakes were observed in a 40' by 40' area. Apparently no collection was made in 1981.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.40'. The ridge slope was eroded and no cultural material was found. Due to the extreme erosion of JH 393, no further testing or site management is recommended.

JH 394:

JH 394 is located on the west shore of the reservoir atop a limestone bluff at a point formed by an inlet and the main channel. The site was first reported by Spriesterbach in 1981 and later updated by GLARC, Inc. in 1984 (site

form). The only cultural material reported was chert debitage.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.40'. Bedrock exposure extended approximately 20' above water. No cultural material was found. Due to the extreme erosion of JH 394, no further testing or site management is recommended.

JH 395:

JH 395, reported by Schermer (1981, site form) is located on a point projecting from a terrace on the west side of the reservoir. This point is on the west side of an inlet formed by a peninsula. A Gibson point, biface fragment, hammerstone, debitage and grit-tempered pottery were collected from JH 395 in 1981.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986 when the pool elevation was at 687.40'. Chert shatter, debitage and fire-cracked rock were collected on the eroded terrace. The point slope was gradual to the water but south of the site the terrace is a 6 to 7' cut bank with the terrace caving into the reservoir. There is no "A" horizon remaining on the terrace. Due to the extreme erosion of JH 395, no further testing or site management is recommended.

JH 396:

JH 396 was first reported by Schermer in 1981 (site form) and later update report was submitted by Emerson et. al. in 1984. The site is located on the western end of a cultivated field on the north shore of the Coralville Reservoir. The site is bounded by a steep ditch (old stream) and a sandy knoll (JH 43) to the west. During the two surface collections one point tip, one stemmed

projectile point, one drill, five core fragments, 78 flakes and two grit-tempered pottery sherds were recovered.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. A large lithic scatter was found on the eroded surface. Due to the severe erosion at JH 396, no further testing or site management is recommended.

JH 397:

JH 397, reported by Schermer (1981, site form) and later investigated by Emerson et. al. in 1984 and GLARC, Inc. in 1984 (site form) is located on a south-east facing slope and cultivated terrace immediately west of a small unnamed tributary to Coralville Lake. The mouth of Hoosier Creek is situated to the south. Over one hundred and fifty flakes, some of which were utilized, one corner notched projectile point and a scraper were found on the eroded, cultivated terrace.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 685.85'. The lithic scatter expanded approximately 1/4 mile from the unnamed tributary southwest to a small drainage. No "A" horizon was intact and severe erosion was everywhere in evidence. Due to the extreme erosion of JH 397, no further testing or site management is recommended.

JH 398:

First recorded by Miller in 1981 (site form), JH 398 is located on a terrace bisected by a recreational vehicle trail just south of a small creek which feeds into Hoosier Creek. Several chert cores, waste flakes, a small end scraper and a small side-notched projectile point were found on a 1/3 acre tract.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 686.62'. A few chert flakes were found on the eroded terrace but the cultural origin is equivocal. Due to the extreme erosion of JH 398, no further testing or site management is recommended.

JH 399:

JH 399 was first reported by Miller in 1981 (site form). The site is located on a sandy knoll north of a short but deep drainage just 100 yards east of Hoosier Creek. A recreational vehicle trail crests at the site and drops into a gully. The knoll forms the point above the confluence of Hoosier Creek and a small stream coming in from the northeast. One flake and two cores were found on the sandy eroded shoreline in 1981.

Great Lakes Archaeological Research Center, Inc. investigated JH 399 in 1986 while the pool elevation was at 486.62'. The lower terrace to Hoosier Creek was partially underwater. Flakes and fire-cracked rock were found along the slope to the 700' terrace. There was a possibility that the site extended to the top of the terrace.

The site was visited again in 1986 to conduct shovel testing and to evaluate geomorphic contexts. The pool elevation was approximately 698' and the water was approaching the level of the 700' terrace. Lower, sloping areas and some of the RV trails were flooding. Materials were found in the water but not on the terrace proper. Two rows of four shovel tests each were placed on top of the terrace, 10 meters apart. One probe was expanded for a soil pit. None of the shovel tests yielded any cultural material.

It is concluded that JH 399 was restricted to the lower elevations below the terrace and because of the eroded

condition of that landscape, no further testing or site management is recommended.

Geomorphic Description:

Site JH 399 is located on a river terrace at an elevation of 700' (210m) A.M.S.L. It is at the mouth of an unnamed tributary flowing west into Hoosier Creek. To the south of the terrace is a peninsular-shaped upland separating Hoosier Creek from Lake MacBride. Local relief (including the upland) is approximately 100' (30m), however, the terrace is flat (< 1° slope). Vegetation is very sparse and the area has been inundated very recently. The water table is 12" below the surface and no soil horizons were apparent. Gravel roads lead into the area from the surrounding upland and the site is very disturbed and littered with "party debris" such a bottles, cans, and food packages.

A pit was dug to 27" (67.5cm) at site JH 399. Four sediment strata were sampled on this terrace at an elevation of 700" (210m) A.M.S.L. Sediments reflect recent deposition and soil horizons have not yet developed, c , ol[illegible]diments from which soil has been stripped. Buried s[illegible]rizons were not found. The water table was encounte[illegible] at 12" (30cm). Bucket auger coring proceeded to 27" (67.5cm [illegible]hen the pit collapsed preventing further sampling.

Stratum 1 (loamy sand) extends from 1 to 1 1/2" (3.75cm). The surface layer contained almost no vegetation. Recent flood debris littered the surface area. Munsell colors of this first stratum are: (a) moist, 10YR 4/3 (brown to dark brown) and (b) dry 10YR 5/2 (grayish brown). Texture is loamy sand and pH is 8.0 (moderately alkaline). Stratum 2 (sand) extends from 1.5 to 12" (3.75-30cm) (water table). Munsell colors are: (a) moist, 10YR 5/4 (yellowish brown) and (b) dry, 10YR 7/3 (very pale brown). Stratum 3 (sand) extends from 12 to 19.5" (49cm). Munsell colors are:

(a) moist, 10YR 5/3 (brown) and dry, 10YR 7/2 (light gray). This stratum is easily distinguishable because it is extremely acid (pH of 4.0). Stratum 4 (also sand) extends from 19.5 to 27" (49-67.5cm). Munsell colors are: (a) moist, 10YR 4/4 (dark yellowish brown) and (b) dry, 10YR 6/3 (pale brown). Small (< 1/2"), round concretions (2.5YR 2.5/0, black) occur in this stratum. Soil pH is 6.0 (medium to slightly acid).

All strata exhibit a fine granular structure. Consistence is the same throughout: when wet, non-sticky and non-plastic; when moist, loose, noncoherent; and when dry, loose (cannot pick up a ped). Boundaries between strata are distinct. None of the strata effervesce with a 14% hydrochloric acid solution.

JH 409:

JH 409, recorded by Krisan (1981: site form), is located in the first gully, 200 feet north of 13 JH 47, on the east side of Coralville Lake. The site lies just below the 712' elevation in Lake MacBride State Park. Materials found during the 1981 surface collection included flakes, pot sherds and one projectile point. No cultural affiliation was recorded with the material. The site was revisited by Emerson et. al. (1984) with a report of one side-notched point, one tool tip and a utilized flake. Later, GLARC, Inc. recovered three chert flakes and a Kramer point during a 1984 visit. Both updates were based on surface collection.

Great Lakes Archaeological Research Center, Inc. investigated the site in 1986, conducting a fourth surface collection and site evaluation. Two chert flakes were collected on top of an eroded silty slope. The slope is extremely disturbed from water pool fluctuations. At the time of collection the pool elevation was 693.86' ASL. Limestone bedrock was exposed at the water line. On top of

the bedrock is a band of red clay with light brown silts along slope surface. At the top of the slope is a forested area with a 6 to 7' vertical cut in the eroded slope. The cut exposure was surface collected and no cultural material was found.

Access to the site can be attained by a service road to the fish hatchery at the Lake MacBride State Park. Due to the extreme erosion along the slope at and above the 712' elevation, no further testing is recommended for JH 409.

JH 425:

JH 425 is located 50 yards west outside of Sugar Bottoms State Park on the highest knoll on the east side. Three waste flakes and two possible cores were found on the surface of a cultivated field in a one acre area. The site was recorded by Miller in 1982 (site form).

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. JH 425 is outside of the ACOE Boundary and should be removed from the Coralville Management Plan.

JH 427:

13 JH 427 was reported in 1983. The site was located during a survey of the proposed Jolly Roger Road improvements by "shovel assisted survey" (Perry, 1983: site form). At the time of the 1983 investigation the site was cultivated. One biface fragment, modified flakes and waste flakes of undetermined cultural affiliation were collected.

This site is not contained within the Coralville Lake property boundaries. As a result, it is removed from management considerations.

JH 428:

JH 428 was first reported by Miller in 1983 (site form). The site is located in a tilled field extending along a ridge top that trends north-south at an elevation above 800'. JH 428 is situated where the ridge turns slightly to the east. The ACOE fence is south of the site. Thirteen flakes, three cores and a triangular projectile point were found in a 1/2 acre cultivated field.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. JH 428 is outside of the ACOE Boundary and should be removed from the Coralville Management Plan.

JH 434:

JH 434, recorded by Miller (1983 site form), is located at the base of a south facing slope of a prominent hill, 1/2 mile northwest of the county road bridge over Hoosier Creek. Three flakes and a corner notched projectile point were found in a 1/2 acre area of a cultivated field.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site area was in wheat with at least 5% visibility. Surface collection did not yield any cultural material. Due to the lack of cultural material and erosion from cultivation, no further testing or site management is recommended.

JH 435:

JH 435 was first reported by Miller in 1983 (site form). The site is further northeast from JH 434 from the small drainage at the base of a prominent hill on the southeast facing slope. The site is an isolated find of one biface in the cultivated field.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The condition was the same as

JH 435. The area was surface collected but no cultural material was found. Due to the lack of cultural material and erosion from cultivation, no further testing or site management is recommended.

JH 436:

JH 436 is located north of JH 435 on the northernmost extension of a prominent hill west of Hoosier Creek. The site was initially reported by Miller In 1983. Nine chert flakes, one small core and a utilized flake were found in a one acre cultivated field.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. Again the condition was the same as JH 434 and no cultural material was located. Due to the lack of cultural material and erosion from cultivation, no further testing or site management is recommended.

JH 474:

JH 474 was first discovered by GLARC, Inc. in 1984 during the course of sampling survey. The site is located on a terrace on the north side of Hoosier Creek, southwest of JH 50 and an ephemeral stream. Nine flakes, three cores, a piece of quartzite and three pottery fragments were collected.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 698'. Three flakes, approximately 1 to 2' above the water level, were found on the eroded shoreline. Due to the extreme erosion of JH 474, no further testing or site management is recommended.

JH 480:

JH 480 was also found by Great Lakes Archaeological Research Center, Inc. during the 1984 survey. The site is

located on a relatively steep shore on a bend formed by an ephemeral stream and the Iowa River. Six flakes, three pieces of shatter, a scraper/graver and a ceramic body sherd were found on a badly eroded shoreline.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.40'. Bedrock and cobbles were exposed 20' above the water table. No cultural material was found. Due to the extreme erosion of JH 480, no further testing or site management is recommended.

JH 483:

JH 483 was first reported by Great Lakes Archaeological Research Center, Inc. in 1984. The site is located in the Hawkeye Wildlife Area, approximately 2 1/2 miles east of East Amana, immediately north of three small ponds in a plowed agricultural field. Six chert flakes were found in the field.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 691+'. The site area was underwater. Due to the flooded condition of JH 483, we were unable to secure additional data. It is unlikely that JH 483 harbors significant research potential. Further, the site is seldom exposed. Aside from checking the site during abnormally low pool levels, no additional investigations are justified.

JH 493:

JH 493, reported by Great Lakes Archaeological Research Center, Inc. in 1984 (site form), is located in a cultivated field west and north of the peninsular near JH 277. Fourteen chert waste flakes were found on the eroded shoreline.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.40'. The shoreline was eroded and surface collection revealed no cultural material. Based on these conditions at JH 493, no further testing or site management is recommended.

JH 496:

JH 496 was discovered during the Great Lakes Archaeological Research Center, Inc. sample survey in 1984. The site is located on a cultivated rise east of the county road to Sandy Beach Public Use Area. Approximately 1/4 mile north of JH 43 and southeast of mid 20th century foundations. A side-notched projectile point fragment and three flakes were found in a field of winter wheat

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The field was presently in alfalfa with at least 5% ground visibility. No cultural material was found during the surface collection. Based on the meagre yield derived from two surface collections conducted when visibility was excellent, JH 496 is determined to have minimal research potential. No further investigations are warranted.

JH 498:

Known as "Swisher (w) 14A," JH 498 was recorded by Great Lakes Archaeological Research Center, Inc. in 1984. The site is just southeast of a large ravine on a plowed northwest facing slope. The site material included one core and two flakes.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The site area was fallowed. There was alot of evidence of ground disturbance. The "B" horizon was exposed from plowing and water erosion gullying. The ground visibility was at least 40% and no cultural

material was found. Due to the extreme erosion and disturbance from cultivation of JH 498, no further testing or site management is recommended.

JH 537:

Known as Ely 140C, JH 537 was first reported by Great Lakes Archaeological Research Center, Inc. in 1985. The site is a small dense lithic scatter on the outside of a horseshoe bend in a small permanent stream feeding into an inlet of the reservoir. Eighty-nine pieces of lithic debitage, two small triangular points and two ceramic crumbs were found in a 15m by 15m area while surface collecting. Supplemental shovel testing failed to reveal any sub-surface features, artifacts, or stable contexts.

Great Lakes Archaeological Research Center, Inc. revisited the site in 1986. The pool elevation was 687.40'. The shoreline was eroded 20 to 30' above the lake level. No cultural material was found, however, the site may have been inundated. Due to the severe erosion at JH 537, no further testing or site management is recommended.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS:

Evaluation Summary:

The total number of archaeological sites subjected to evaluation at Coralville Lake now totals 276. This represents an approximate 88% sample of the total site inventory (N=313) that have been processed through the management system phases of identification and evaluation. (sites that could not be relocated, were misreported, or remain unevaluated, are listed in the Coralville Lake Management Plan and supplemental data files). Subsequent to evaluation, each site has been assigned to a final management category of conservation, preservation, no management, and/or interpretation (Overstreet 1986).

Of this total, a single archaeological site, 13 JH 272, is considered eligible for the National Register of Historic Places. The remaining sites have all been so severely impacted by erosio , collector activity, or previous excavation (in some cases all three impacts in combination) that further work will result in redundant data. Therefore, they are considered not eligible for the National Register of Historic Places. Most sites reflect lag deposits where artifacts have been translocated downslope as entire landforms have been removed by lake level fluctuation and associated scouring. Collector activity is intensive at Coralville Lake with peaks of activity following decreases in lake levels. Not all site destruction, however, can be associated with operation of the Coralville Lake dam. Higher sandy terraces that are seldom inundated have been subjected to deflation. Some of these events occurred during early and middle Holocene times (Anderson and Overstreet 1986), but, significant erosion can be considered to be the result of historic agricultural practices. In any event, the results have been the same. That is to say, site

matrix has been removed, cultural materials have been mixed and redeposited, and the stratigraphic context of archaeological sites has been destroyed.

The upland sites that have been subjected to cultivation have also been, for all practical purposes, disturbed to a degree that prohibits fruitful future investigation. Camps on the cultivated dissected uplands have, in every instance, had their contexts removed by rill erosion, slope wash, and, probably to lesser extent, aeolian-induced deflation. The notable exception to this situation can be seen at upland sites that have not been cultivated. Here, as is the case with JH 272, a shallow soil profile contains cultural debris and the prospects for recovering data from relatively undisturbed contexts and for discovery of sub-surface features are promising.

At first appraisal the significance of JH 272 may seem marginal, however, there are many factors that must be entertained in the evaluation of research potential. First, large collections from sites at Coralville Lake have been mixed. For this reason it is difficult to infer patterns of procurement and processing of raw materials. JH 272 likely has little depth given its geomorphic context on an interfluve crest. However, the site is expansive and with proper horizontal controls it should be possible to isolate components or activity areas. This cannot be stated as a reasonable assumption for more than 270 sites at the project locality.

A second important research potential for JH 272 is the establishment of absolute chronology through radiocarbon assay or other means. Virtually all cultural chronology at Coralville Lake is currently established by cross dating of artifacts that are stylistically similar to those of other regions. This is a generally sound application, however, time-transgressive phenomena should not be discounted. Thus, the research value of JH 272 is enhanced by its potential for chronological assessments not only of

components at JH 272 but at regional sites that have been destroyed.

A third consideration that applies to the evaluation of JH 272 is the proximity to rockshelters excavated and tested by Caldwell (1961). Woodpecker Cave is one of the most thoroughly documented archaeological site at Coralville Lake. The immediate proximity of Woodpecker Cave to JH 272 provides a sound basis for the assumption that some activities of the rockshelter inhabitants (i.e., processing of raw materials, in this case local cherts) were carried out on the interfluve crest. This means, of course that there is a high probability that certain behaviors as reflected in the cultural deposits at JH 272 may be correlated with those at Woodpecker cave through re-analysis of Caldwell's (1961) data.

For these reasons I believe that a determination of eligibility for the National Register of Historic Places for JH 272 is warranted. Additional investigations at the site can be expected to yield information important for (1) establishing site-specific and local absolute chron ogy; (2) identifying the procurement patterns of local raw materials for manufacturing stone tools; (3) defining local chert reduction techniques and sequences; and (4) identifying additional behaviors of the residents of Woodpecker Cave that were carried out on the interfluve crest immediately adjacent to the rockshelter. Finally, JH 272 takes on an additional dimension of significance because it is likely one of very few remaining open air sites at Coralville Lake that has not had its stratigraphic context destroyed by erosion related to climatic events during the early and middle Holocene, by historic agricultural practices, or by erosion associated with the operation of the Coralville Lake project.

Conclusions:

Inventory, evaluation, and conservation measures have demonstrated that the loss of data that can normally be expected to address research questions for historic and prehistoric archaeology have been lost. Investigations that were implemented in the 1940's (Wheeler 1949) and 1950's (Caldwell 1961) were consistent with legislative mandates at the time of project development. Thus, it is more a matter of historical accident that more comprehensive studies with research orientations (e.g. Anderson 1971a, 1971b, Schermer 1983, Emerson et al 1984, Overstreet, Stark and Anderson 1985, Overstreet and Stark 1985a, 1985b, Anderson and Overstreet 1986) were conducted after most of the site destruction had already been accomplished.

The evaluation phase at Coralville Lake is considered complete. Additional evaluation studies would in my opinion, simply generate duplicative information. Unfortunately, we will not be able to secure more than a broad understanding of prehistoric occupation of this reach of the Iowa River valley. Detailed geomorphic studies demonstrate that preserved contexts which may harbor additional intact sites still do exist at the project site. However, these occur for the most part in an area with a complex suite of landforms characterized by a series of steep and low angle alluvial fans on the northern Iowa River valley margin in the Hawkeye Wildlife refuge. At the same time, these contexts are preserved in place by natural erosional and depositional processes and are not currently threatened by project operations. It is possible that future developments or construction activities could expose some of these surfaces. Because of the difficulty of locating deeply buried sites it is not feasible to conduct additional inventory or evaluation except on a case by case basis where deep excavations are anticipated. However, if future lake elevation increases are anticipated, erosional impacts to this locality of buried and dated surfaces should be closely scrutinized.

Recommendations:

Additional investigations to evaluate archaeological sites for National Register of Historic Places eligibility should not be conducted at localities along the Iowa River downstream from the I-380 bridge. An 88% sample of the current inventory has already been subjected to evaluation thereby providing an adequate base for these recommendations. Future work would most profitably be focused on Corps lands in tributary valleys and in locations adjacent to the Hawkeye Wildlife refuge. The latter is a lower priority as potential buried site contexts in alluvial fans are not threatened at this time. Should pool raises be contemplated, geomorphic and or trenching should be conducted.

During the course of the field investigations, site locations were refined by recording Universal Transverse Mercator projection coordinates for site boundaries. Where a surface extent could be defined, four coordinates were calculated. Where isolated finds or very restricted scatters were encountered, a single reference point was recorded in the UTM system. However, in situations where we were unable to verify the precise site location from cultural debris, the present site recording was not modified. The tabulation of UTM reference points for archaeological sites is attached to this report as Appendix B. It is recommended that these data be incorporated within the geographic information system (CADD Atlas) established as part of the management plan for Coralville Lake.

Finally, the information secured from the 1986 evaluation phase has been incorporated within the final cultural resources management plan for Coralville Lake.

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APPENDIX A

SCOPE OF WORK

PART I - SECTION C, Description/Specifications/Work Statement.

I. OBJECTIVE

1.1 The following described professional services contract requires the development and execution of a research design for field reconnaissance (Stage 1) of 30 previously identified prehistoric sites to determine potential eligibility for inclusion in the National Register of Historic places (NRHP). The research design also shall provide for the execution of an intensive archeological testing program (Phase II testing) to evaluate the significance of no more than 10 archeological sites or significant geomorphological contexts based upon the Stage 1 results. The Contractor shall make detailed recommendations concerning the eligibility of tested sites for inclusion in the National Register of Historic Places. The 10 sites or locations to be tested as part of Stage 2 work will be selected by the Rock Island District archeologists in consultation with the Contractor and the Iowa State Historic Preservation Officer (SHPO) based upon the results of the initial 30-site reconnaissance. These sites are located on Federal land (33,685 acres) for the Coralville Lake project managed by the Rock Island District, Corps of Engineers (Exhibit 1).

1.2 The major work elements under this solicitation are: (1) development of a research design for a reconnaissance survey and geomorphological evaluation of 30 site locations using data provided in The Archeology of Coralville Lake, Iowa: Volumes I-VII, prepared by Great Lakes Archeological Research Center, Inc. (GLARC); (2) execution of the archeological reconnaissance and analysis in support of the research design; (3) make recommendations based on item "2" above as to the condition of each of the 30 sites and each site's potential or lack of potential concerning eligibility for inclusion in the National Register of Historic Places; (4) in consultation with the District Archeologist and the Iowa SHPO, up to 10 potentially significant sites will be selected for Intensive Archeological Testing (Phase II testing); (5) execution of archeological testing and analysis for the 10 site locations in support of the previously developed research design; and (6) the preparation of a high quality technical report on the results of the field investigations and analysis with individual recommendations concerning the condition and potential NRHP eligibility of each of the 30 sites surveyed and recommendations concerning the actual NRHP eligibility of each of the 10 sites tested.

1.3 This action is in accordance with the National Historic Preservation Act of 1966 (as amended), Executive Order 11593, the Archaeological and Historic Preservation Act of 1974, and Title 36 of the Code of Federal Regulations (Parts 60-66 and 800, as appropriate). Additional references include the guideline entitled Treatment of Archeological Properties (Advisory Council on Historic Preservation 1980) and guidelines set forth by the National Park Service, Department of the Interior (Federal Register Vol. 48, No. 190, Thursday, September 29, 1983) entitled Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines.

this RFP). Offerors should submit a comprehensive scheduling plan to document anticipated levels of effort per task and to provide this District with a monitoring schedule for contract performance (note: separate Stage I and Stage II field efforts). Contract award will not necessarily be based upon low estimated price, but on the most advantageous combination of method, price, and schedule that best meets the Government's needs for planning at Coralville Lake. This will be a firm-fixed price negotiated contract. However, note that award may be made without negotiation if a competitive pool of proposals is received that can be awarded without modification or clarification. The objective is to obtain the maximum amount of useful information in the most cost-efficient manner.

3.5 Laboratory procedures shall be described for special studies such as soils and C-14 analyses. Prospective Contractors shall include in proposals a discussion of the capabilities and facilities to adequately perform required laboratory analyses and for curation upon completion of the project. Curation standards shall be those set forth by the National Park Service, Department of the Interior (Federal Register, Thursday, September 29, 1983:48:190:44737) entitled Archeology and Historic Preservation Standards; Secretary of the Interior's Guidelines.

3.6 Remote sensing applications should be described, if proposed, particularly in terms of the data sought and the efficiency or interpretive capabilities in relation to traditional collection/analysis procedures.

3.7 The Contractor shall submit the technical proposal in the form of a Research Design. This plan shall be designed for decisionmaking in two stages.

IV. SPECIFICATIONS

4.1 The Contractor shall execute the Research Design, including all items listed in the Proposal Section of this RFP. Stage one will include a reconnaissance visit to each of the 30 sites listed in Exhibit 3. The management plan (Overstreet 1985) identified these sites as having a high priority for evaluation. It is likely that an unknown number of the sites do not have any additional research potential. It would be appropriate for a two-person team consisting of a qualified geomorphologist and an experienced archeologist to conduct a reconnaissance survey to determine research potential. Significant effort supported by empirical documentation must be utilized to demonstrate either the potential for research or the futility of future expenditure of time and effort. A determination of potential significance or no potential significance shall be made for each site. In addition, each site's geomorphological context shall be evaluated and this information used as a test to refine the geomorphological model developed by GLARC.

4.2 Following the first stage of the study, a preliminary summary of the results with recommendations will be provided to the District Archeologist. In consultation with the Contractor and the Iowa SHPO, no more than 10 of the sites considered to have potential for being included on the National Register will be selected for Intensive Archeological Testing (Phase II testing) under this contract. Stage two will consist of execution of the research design to

evaluate the 10 sites as to eligibility for inclusion on the National Register of Historic Places. If less than 10 sites warrant testing, the District and the Contractor shall meet to determine how to reallocate funds and time for the performance of additional but reasonably equivalent tasks. Several alternative solutions will be considered:

a. It may be that while less that 10 sites merit further work, the sites that will be tested require additional time and funding for appropriate treatment.

b. Several key geomorphological contexts (i.e., fans, terraces) could be tested to improve the landscape model.

c. It may be determined that additional survey (i.e., Hawkeye area or tributary valleys) is the best avenue for improving our understanding of prehistoric/historic cultures.

d. A separate effort aimed at historic sites may be considered.

4.3 To determine site significance it will be necessary to:

a. Identify site limits and integrity.

b. Determine the kind of data that can be recovered from the site (i.e., settlement, subsistence, technology, culture history, etc.)

c. Identify specifically what information (research questions) important to prehistory or history will be answered if additional excavations (mitigation) are required.

4.4 The proposal will specify the following:

a. What kinds of data will be collected to determine site significance.

b. What methods will be used for data recovery.

c. What types and levels of analyses will be conducted.

d. What data may be lost or deemphasized as a result of "a" and "b" above.

These are considered the minimum topics that must be addressed. The product is expected to go beyond them and must be as specific and detailed as the existing data allow.

4.5 Offerors are invited in their proposals to suggest improvements on the Scope of Work so long as the minimum requirements are met. The investigations shall be designed to maximize compatibility and comparability with previous research conducted by GLARC at Coralville Lake. The background literature search for this project was consolidated by GLARC at an earlier phase, and it is not necessary to repeat this research. However, the successful bidder should familiarize himself with the previously collected data.

4.6 The Contractor shall also familiarize himself with all artifacts and information on the 30 sites being investigated that are currently curated at the Office of the State Archeologist, University of Iowa. Detailed artifact analysis will be restricted to those artifacts recovered during the execution of the present contract. However, a statement on previous collections shall be included for each site.

4.7 Based on the results of the Intensive Archeological Testing (Phase II testing), the Contractor shall make site-specific recommendations for pursuing or not pursuing a Determination of Eligibility (DOE) for each of the 10 locations. All necessary information for preparing a DOE shall be provided to this agency for any site recommended to be significant. The Contractor also shall recommend appropriate preservation, conservation (mitigation of adverse effects), and interpretation measures for each site.

4.8 Methodological recommendations for any necessary data recovery or preservation procedure also shall be included in the report.

4.9 The Contractor shall provide all information needed to update the Coralville Lake site file.

4.10 The Contractor also shall be required to amend table 7-10 of the Coralville Lake CRMP/Overview and supply new table sheets based upon the results of this contract.

V. REPORT

5.1 The principal investigator shall be responsible for preparing a comprehensive technical report on the results of this investigation. This report will be in the format as described in Exhibit 4 (attached). Basic data description, including provenience and metrics, photographs and drawings, will be provided for use both in support to the author's arguments and conclusions, and as a source of basic information that may find wider use by other archeologists, as well as the Corps of Engineers.

5.2 Six copies of the draft report shall be submitted to the Contracting Officer for review 140 days after work begins on the contract. Draft reports shall be complete when submitted, unless other arrangements are made with the Contracting Officer, no less than 30 days prior to the due date. Changes directed by the Contracting Officer based upon draft review shall be made prior to submission of a final report. In the event that major revisions are required, the Contracting Officer may request, and the Contractor will supply, a revised draft report for review at no additional cost to the Government. In the event that a revised draft is required, it will be due 30 days after notice of the Contracting Officer. The final version will be due 30 days after the Contracting Officer approves the draft.

5.3 The draft review period may be as long as 60 days. The intervening time is necessary to obtain reviews from the State Historic Preservation Officers, the District, and the National Park Service (Interagency Archeological Services).

ORIGINAL SITE AUDIT - CAO

AMENDMENT OF SOLICITATIO MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
CW25-86-C-0036	1 | 1

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
P00001	'86 OCT 03		Arch Recon - Coralvil

6. ISSUED BY CODE A5259B

US Army Engineer District, Rock Island
Clock Tower Building
PO Box 2004
Rock Island, Illinois 61204-2004

7. ADMINISTERED BY (If other than Item 6) CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

Great Lakes Archaeological
Center, Inc.
PO Box 17767
Milwaukee, Wisconsin 53217

CODE FACILITY CODE

(V) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X 10A. MODIFICATION OF CONTRACT/ORDER NO. DACW25-86-C-0036

10B. DATED (SEE ITEM 13) 86 APR 11

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

96X3123, Operations & Maintenance CB 008 05 4A0 0 0000

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(V)

X A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
Contract Clause 35 - CHANGES

☐ B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

☐ C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

☐ D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 2 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Attached is a modification to original Scope of Work. Also due to the high water level at the reservoir this summer and the additional site evaluations to be conducted under the Scope of Work modification, attached, the project completion schedule is changed as follows:

Draft Report Due	Jan 20, 1987
Draft Review Period	Jan 21 - Mar 20, 1987
Final Report Due	Apr 20, 1987

This modification shall be no cause for a change in contract price.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
DAVID F. OVERSTREET PRESIDENT	BONNIE R. SHADDEN Chief, Contracts Branch

15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
David F. Overstreet (Signature of person authorized to sign)	10/9/86	BY Bonnie R. Shadden (Signature of Contracting Officer)	86 Oct 3

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE

30-105

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

DACW25-86-C-0036
Archeological Site Evaluation, Coralville Lake, IA.
Great Lakes Archaeological Research Center, Inc.

MODIFICATION 1

I. OBJECTIVE

1.1 The purpose of the original Scope of Work (SOW) was to evaluate 30 archeological sites to determine their eligibility for inclusion on the National Register of Historics Places. This work was to begin in the spring of 1986. However, due to the unusually high water level in the reservoir this summer work could not begin until late summer.

1.2 Many of the sites evaluated are so severely disturbed by reservoir erosion that additional investigations are unwarranted. Other sites are still below the current water level and will not be above water this year (maybe never).

1.3 On 9 September 86 District Archeologists Ken Barr and Chip Smith conducted a field inspection of the project area. District staff agreed with the Principal Investigator , Dr.David Overstreet, that approximately 90% of the sites that had been subject to field evaluation had been destroyed by reservoir erosion and no further work was warranted. A potential modification to the SOW, to include evaluation of approximately 70 additional sites, was discussed by District staff and the Contractor.

1.4 This modification provides a directed change to the original SOW in the form of:

1. Evaluation of appproximately 70 additional sites
2. Time extension to complete task 1 above
3. Specification of Project Report format

1.5 The modification requires no additional costs to the government.

II. SPECIFICATIONS

2.1 The Contractor shall complete the evaluation of previously unevaluated sites located within the Coralville Reservoir Project area. The District realizes that it is not practical to evaluate any sites currently inundated. Evaluation of these inundated sites will be pursued under seperate contract when and if the water level receeds. A list of inundated sites requiring additional investigations shall be provided as part of the final report.

2.2 For each site evaluated an up-dated Iowa site form will be completed. Management codes will be established and the sites will be integrated into the exisiting management framework. Those sites requiring additional subsurface work will also be completed. Additional work will take the form of coring, shovel probing and test excavations. Data are to be presented in a format for integration within the Coralville (CADD) atlas.

III REPORT

3.1 This contract will result in the following products:

1. Technical Report: including a narrative section and all additional site evaluations
2. Summary Report: an overview of the Coralville investigations and a final management plan
3. Popular Report: camera ready copy for reproduction and suitable for wide audience distribution

IV SCHEDULE

4.1 Due to the high water level at the reservoir this season which delayed project startup and the additional site evaluations to be conducted under this modified Scope of Work, the Project completion schedule shall be modified as follows:

Draft Report Due	20 Jan 87
Draft Review Period	21 Jan - 20 Mar
Final Report Due	20 April 87

he District realizes that if the unseasonable rainy weather continues into late October in may not be possible to complete the fieldwork until next spring. If this happens a second schedule modification may be necessary.

V GENERAL

5.2 Unless specifically addressed in this modification, all conditions of the original contract (and proposal) remain in force.

APPENDIX B

UTM COORDINATES

Site #	1 NW	2 NE	3 SE	4 SW
JH 6	N: 4627325 E: 616580	4627325 616617	4627288 616617	4627288 616580
JH 31	N: 4627718 E: 618040	4627718 618060	4627700 618060	4627700 618040
JH 33	N: 4625680 E: 619380			
JH 36	N: 4627585 E: 613950			
JH 42	N: 4628725 E: 618420	4628725 618440	4628680 618440	4628680 618420
JH 43	N: 4630190 E: 617380	4630190 617500	46301080 617500	46301080 617380
JH 47	N: 4627745 E: 618080			
JH 49	N: 4626380 E: 617160	4626380 617180	4626360 617180	4626360 617160
JH 51	N: 4629880 E: 613060	4629880 613175	4629780 613175	4629780 613060
JH 109	N: 4629240 E: 608640	4629240 608660	4629190 608660	4629190 608640
JH 123	N: 4628925 E: 615745	4628925 615840	4628895 615840	4628895 615745
JH 144	N: 4626800 E: 615400	4626800 615425	4626780 615425	4626780 615400

Site #	1 NW	2 NE	3 SE	4 SW
JH 150	N: 4629880 E: 613200	4629880 613240	4629860 613240	4629860 613200
JH 152	N: 4629820 E: 612900	4629820 613020	4629780 613020	4629780 612900
JH 153	N: 4627585 E: 614130	4627585 614180	4627520 614180	4627520 614130
JH 155	N: 4628790 E: 615180	4628790 615260	4628760 615260	4628760 615180
JH 187	N: 4629200 E: 606120	4629200 606160	4629160 606160	4629160 606120
JH 203	N: 4621880 E: 622925	4621880 622928	4621873 622928	4621873 622925
JH 204	N: 4621580 E: 622880	46211580 622893	4621578 622893	4621578 622880
JH 205	N: 4621180 E: 621520	4621180 621550	4621150 621550	4621150 621520
JH 206	N: 4621410 E: 621000			
JH 240	N: 4629800 E: 612410	4629800 612460	4629720 612460	4629720 612410
JH 248	N: 4629865 E: 612900	4629865 612930	4629825 612930	4629825 612900
JH 260	N: 4628850 E: 612110			

Site #	1 NW	2 NE	3 SE	4 SW
JH 264	N: 4628060 E: 613540	4628060 613580	4628020 613580	4628020 613540
JH 268	N: 4626455 E: 615360	4626455 615410	4626420 615410	4626420 615360
JH 270	N: 4629140 E: 616000	4629140 616075	4629065 616075	4629065 616000
JH 272	N: 4626860 E: 619660	4626860 619697	4626823 619697	4626823 619660
JH 273	N: 4624860 E: 619780	4624860 619787	4624853 619787	4624853 619780
JH 275	N: 4631400 E: 619685	4631400 619720	4631375 619720	4631375 619685
JH 279	N: 4624820 E: 619180	4624820 619255	4624745 619255	4624745 619180
JH 301	N: 4626210 E: 619890			
JH 303	N: 4629980 E: 617430	4629980 617490	4629940 617490	4629940 617430
JH 306	N: 4631080 E: 618840	4631080 618900	4631020 618900	4631020 618840
JH 329	N: 4622130 E: 620815	4622130 620880	4622045 620880	4622045 620815
JH 333	N: 4626390 E: 616255	4626390 616300	4626360 616300	4626360 616255

Site #	1 NW	2 NE	3 SE	4 SW
JH 338	N: 4630160 E: 613200	4630160 613220	4630080 613220	4630080 613200
JH 339	N: 4630975 E: 612785	4630975 612820	4630925 612820	4630925 612785
JH 340	N: 4621060 E: 621220			
JH 354	N: 4629285 E: 606390	4629285 606440	4629240 606440	4629240 606390
JH 364	N: 4625600 E: 619230	4625600 619280	4625555 619280	4625555 619230
JH 366	N: 4625400 E: 617820	4625400 617860	4625350 617860	4625350 617820
JH 367	N: 4625380 E: 617760	4625380 617800	4625335 617800	4625335 617760
JH 371	N: 4630145 E: 618350	4630145 618395	4630100 618395	4630100 618350
JH 372	N: 4630100 E: 618255			
JH 374	N: 462275 E: 621285			
JH 379	N: 4628300 E: 617320			
JH 389	N: 462845 E: 615490			

Site #	1 NW	2 NE	3 SE	4 SW
JH 395	N: 4627800 E: 617460	4627800 617505	4627760 617505	4627760 617460
JH 396	N: 4630200 E: 617340	4630200 617500	4630100 617500	4630100 617340
JH 397	N: 4630385 E: 616675	4630385 616920	4630225 616920	4630225 616675
JH 398	N: 4631600 E: 620050	4631600 620100	4631555 620100	4631555 620050
JH 399	N: 4631550 E: 619855	4631550 619900	4631470 619900	4631470 619855
JH 409	N: 4627925 E: 617965	4627925 617995	4627900 617995	4627900 617965

APPENDIX C

DRAFT MEMORANDUM OF AGREEMENT

MEMORANDUM OF AGREEMENT
FOR
TREATMENT OF HISTORIC PROPERTIES
ON FEDERALLY-CONTROLLED LANDS
AT
CORALVILLE lAKE, IOWA

WHEREAS, the U.S. Army Corps of Engineers, Rock Island District (hereinafter referred to as NCR) has completed the construction of the Coralville Lake Flood Control Project, on the Iowa River, Iowa; and

WHEREAS, NCR, the Iowa State Historic Preservation Officer (hereinafter referred to as SHPO), and the Advisory Council on Historic Preservation (hereinafter referred to as ACHP) have consulted on project construction and operations effects; and

WHEREAS, NCR has made significant and reasonable progress in carrying out its responsibilites under Sections 106 and 110 of the National Historic Preservation Act (as amended in 1980) and all related laws, regulations, and guidelines; and

WHEREAS, the general nature and extent of the cultural resource base is fairly well known based upon approximately ten years of intensive study, the development of cultural resource overviews, the delineation of geomorphological models, and the completion of an acceptable historic properties managment plan (see attached bibliography); now,

THEREFORE, NCR, the Iowa SHPO, and the ACHP agree that historic properties and effects to these properties have been fully considered for project operations purposes and that execution of the attached stipulations will insure appropriate treatment of significant historic properties.

Execution of this Memorandum of Agreement evidences that NCR has afforded the Iowa SHPO and the ACHP a reasonable opportunity to comment on the Coralville Lake Project, project operations, and effects to historic properties, and that NCR has taken into account the effects of its undertaking on historic properties.

_____ _____

District Engineer Date
U.S. Army Corps of Engineers

_____ _____

Iowa State Historic Preservation Officer Date

Executive Director Advisory Council on Historic Preservation	Date
CHAIRMAN Advisory Council on Historic Preservation	Date

STIPULATIONS

1. NCR will follow the guidance set forth in the Cultural Resources Management Plan (Overstreet 1986) and insure that the Plan is updated annually.

2. It is agreed, based upon scientific investigations and evaluations completed to date, that there is only ONE (13JH272) significant historic property on Federally-controlled land from the damsite, north and west, to the point where the Iowa River passes under the Interstate 380 Bridge (see attached map). Hence, except for insuring the protection of site 13JH272, any operations, construction, or management actions including the following activities can be categorically excluded from further Section 106 review except for unanticipated resources encountered during construction or some other fortuituous event: boat ramp, parking lots, bank stabilization/ riprapping, agricultural leases, trails, roads, forest management, and recreation development. A list of actions cleared under this exclusion shall be provided to the Iowa SHPO on an annual basis. Any resource discovered during construction will immediately be reported to the NCR and Iowa SHPO archaeologists for action under normal Section 106 and 36 CFR Part 800 procedures for emergency cases. Furthermore, NCR will proceed with nomination of site 13JH272 to the National Register of Historic Places.

3. As a result of the investigations listed in the attached bibliography, the Identification and Evaluation phases for Coralville Lake Project historic properties shall be considered completed for those lands south and east of the Interstate 380 Bridge (see attached map). Future activities in the project "mainstem" will consist primarily of testing of experimental survey / excavation techniques, erosion monitoring, and the development of public interpretation trails, displays, slide shows, brochures, lectures, and movies. These activities will be done as funding becomes available.

4. NCR recognizes that very little historical, archeological, geomorphological, and architectural work has been done west and north of the Interstate 380 Bridge in the area generally referred to as the Hawkeye Wildlife Refuge. This has been because impacts were preceived as relatively low in relation to the "mainstem" area; however, NCR recognizes that the same mandates to Identify, Evaluate, and Protect apply to the Hawkeye Wildlife Refuge. In fact, this fairly unaltered area may be the only place within project boundaries where the prehistory and history of the central Iowa River Valley can be studied in undisturbed contexts. Therefore, NCR will request funds to:

a. Complete intensive geomorphological, archeological, and historical studies in the Hawkeye Wildlife Refuge area pursuant to the legal mandate to Identify, Evaluate, and Protect significant historic properties on Federally-controlled lands

b. Work with the Iowa Department of Natural of Resources to insure that they are aware of NCR's Cultural Resource Managment Plan, and to attempt to establish valid procedures under their lease agreement for coordination with NCR Archeologists and the Chief SHPO Archeologist for the identification, evaluation, and protection of significant historic properties

c. Ensure that normal Sections 106/110 and 36 CFR 800 requirements are followed for the managment of historic properties in the Hawkeye Wildlife Refuge, including nomination of significant properties to the National Register of Historic Places, careful evaluation of any impacts and impact reduction/avoidance strategies, and responsible managment of Federal collections and reports

d. Use sampling strategies (i.e., 35%) for field studies in order to obtain fairly refined overview and site distributional information for the Hawkeye Wildlife Refuge area, although specific actions or impacts which require specific detailed study (survey, testing, data recovery) will be accomplished in accordance with Section 106, Executive Order 11593, 36 CFR 800, and the Archeological and Historic Preservation Act.

4. Any plan to permanently raise the levels of the conservation and/or flood pools will result in a comprehensive impact analysis in any NEPA document that might be required (or coordinated separately per 36 CFR 800), to insure that this MOA still adequately protects historic properties. NCR will notify the Iowa SHPO and the ACHP of the results of this analysis and, if necessary, submit a new agreement, or an amended agreement, for consideration.

5. Nothing in this MOA is intended to prevent NCR from consulting more frequently with the Iowa SHPO or the ACHP concerning any questions that may arise, or on the progress of any actions covered under this MOA.

6. Any of the signatories to this MOA may request a reconsideration of its terms or revoke the MOA upon written notice to the other signatories. This MOA may be extended beyond Fiscal Year 1997 by agreement between the signatories and written concurrence of the Executive Director of the Council.

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